

The Australian **COMMODORE** **& AMIGA**

Review

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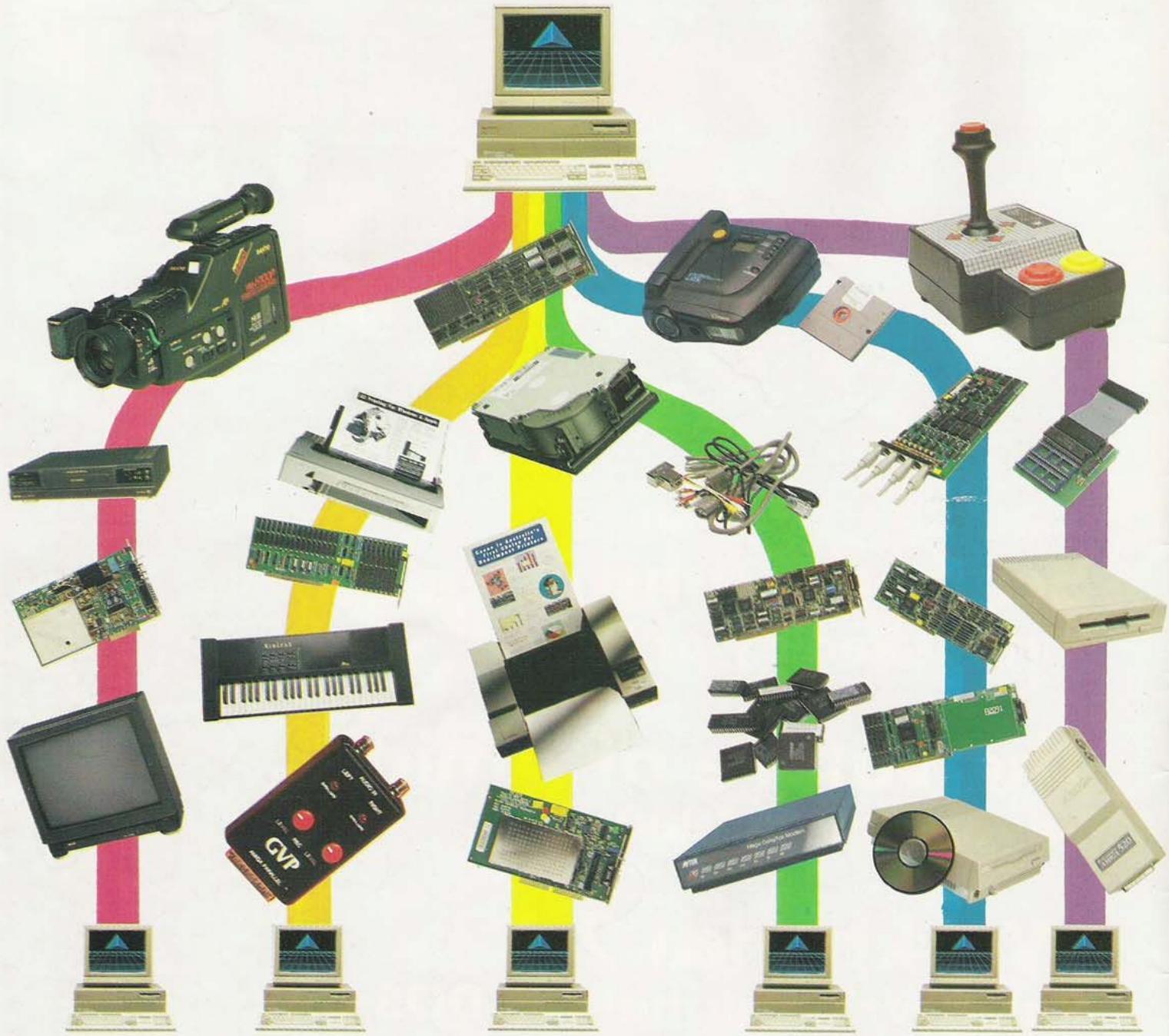
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November 1992

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Editorial

Response to the launch of the A4000 has been very positive. The local Commodore offices have been deluged with enquiries. In this month's issue of ACAR, we've got lots more juicy information on the future of the Amiga range. There's also a sneak preview of Workbench 2.1, a small but significant upgrade which solves a few known 2.x problems as well as adding a number of useful features.



Digital Micronics Digital Editmaster is also attracting lots of interest - Gsoft (08) 254 2261 will be handling distribution in Australia. Early '92 we should see a number of new Digital Video Effects cards and a swag of improved animation programs including *Real 3D 2.0*, *Imagine 3.0* and *Aladdin* (the new name for *Draw 4D*), not to mention a truck load of morphing software.

Word from the retail world is that the Amiga 600 is doing well. Commodore's \$999 pack which includes an A600, monitor and some free PD software is proving a popular choice. No doubt the look and feel of Workbench 2.0, not to mention the A600's cute shape, must be helping a bit there. By this time next year there's also a good chance Commodore will be shipping an A600 style machine with the AGA chip set - it may even be sooner. At the moment, we have quite a backlog of products waiting to be written about. As much as we would like to pump out a bigger Review each month, the figures have to add up, so we'll try to put in the most interesting of what's new and keep the reviews short and to the point. If you want to see something in particular reviewed, please write in and tell us and we will give your suggestions priority.

Wordprocessing is starting to hot up again. *Kindwords 2.0* is making up for the slightly dodgy reputation the earlier versions had. *Wordworth* is doing well, with upgrades expected real soon now and from the USA, *ProWrite 3.3* is now shipping - with far improved graphics support.

As wordprocessing remains one of the most popular uses for a home computer, we're planning a major feature on this area early in the new year. In the mean time, I'm looking for your comments on your favourite package. What do you like/love/hate? Drop us a line and we'll include the most interesting reader comments in our wordprocessing guide coming up.

Next month we kick off the long awaited desktop publishing column. I'll be taking a look at *Professional Page 3.0*, *Professional Draw 3.0* and there will be a short review of *Hotlinks for Pagestream*. Examples of Amiga produced desktop publishing will be published in every column, so if you want to see your name up in lights, send us a disk containing your creation.

Andrew Farrell

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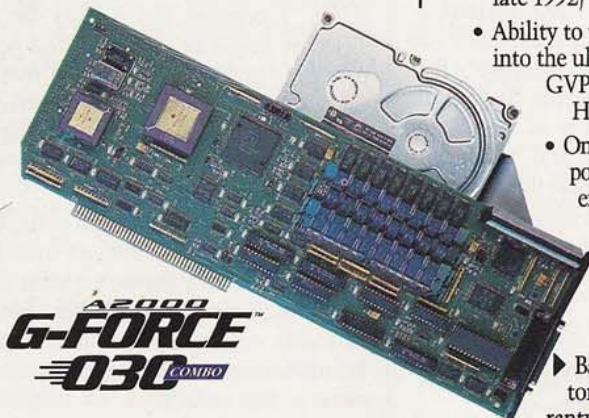
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UPDATE COLUMN

By the time you read this AMOS PROFESSIONAL should be already in stock and at your retailers. This absolutely brilliant package has over 200 new commands, making the total over 700. All programmes written using Amos or Easy Amos can be simply loaded into AMOS PROFESSIONAL. The unique feature is the on-line help which provides details on the command and another click gives you a thoroughly documented working example.

AMOS PROFESSIONAL also features a brand new Editor with Drop Down Menus, Keyboard Macros, Undo/Redo and Multiple Windows on screen.

- IFF information that runs faster than in DPaint.
- Arexx support.
- MED Music Library support with MIDI Data Send.
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Ram Rumbles

Commodore and Newtek Falling Out?

Rumour has it that Commodore and Newtek are allegedly at war. The story goes that Newtek is displeased with Commodore because the Toaster doesn't fit in the A3000 or A4000; about the problems they had with the ECS Denise; about Commodore's snit over covering the Amiga name; etc.

Commodore is displeased at Newtek's covering of the Amiga name; failure to properly follow specs (so the Toaster would fit in new machines); as well as general snootiness. So, big deal?

What if Newtek had a version of the Toaster that fits in the A3000 and is holding it back to annoy Commodore? What if Newtek is six months away from having a stand-alone version of the Toaster (can you say "law suit" boys-n-girls?).

Would Commodore stop production of the A2000 at the end of the year and force Newtek to release an A3000/4000 version of the Toaster. Ain't life fun?

If Newtek really has a stand-alone version of the Toaster, then that means they must've reverse-engineered the custom chips. That also means an impending Commodore lawsuit and injunction against Toaster sales. Most likely Newtek would go belly up (Newtek may be hot, but Commodore is big and has the cash to wait out a law suit). Can you say "Commodore buy out?"

GVP and Commodore Team Up?

On the other end, word is that Commodore and GVP are so tight, on any given day you may see more GVP engineers at Commodore than at GVP and

more CBM engineers at GVP than Commodore.

Word is Commodore's upcoming SCSI-2 board was designed mostly by GVP. Adding to this rumour, a Commodore executive stated recently that GVP might be releasing a daughter board for their Combo card which contained the AGA chips and DSP!

Media Moments

On the NBC Today Show, channel 7 at 1.00 a.m. Yes, I am an insomniac (that was one of the reasons for buying the A500). They showed some American scientists doing weird things, but at least they were doing it with the Amiga.

The scientists used the A2000, a couple of 1084S monitors and an unseen video digitiser. They digitised the mating dance of the male jumping spider and then used *Deluxe Paint III* to animate the pictures. When played back, the animation fools the female spider into thinking there is a real male spider doing a mating dance on the monitor. They changed the animation with *Deluxe Paint III* to see how the female spider would react to the changes in the mating dance. The moral of this story is, if you have a lonely pet spider, buy the Amiga to keep it company.

Telecom Trapper Owns Amiga

On the 3rd August, 1992 on A Current Affair, a reporter did a story on how Telecom might be ripping some people off with "phantom" calls. One man, by the name of Ray Owen, was interviewed whilst sitting in front of his computer - an A500! It even had a new model 1084 monitor connected.

Another use of the Amiga in the business world, I have just been told, is in connection with the touch screen information units in the new Myer centre in Adelaide. Apparently, they're all controlled on the inside by an Amiga, much the same as you reported a few issues back about the airport terminal in the States. Good to see the Amiga ahead of the rest when it comes to multimedia.

Our ever faithful contributor - A. Gormly. Thanks! □

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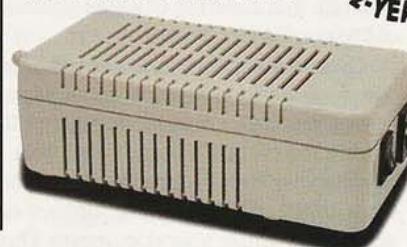
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Notepad

(Exclusive - Regular excerpts from
AM-Report International)

In Brief

- Coming soon, a hard drive for the CDTV expansion slot (presumably 2.5" IDE a la A600)
- Announced by Commodore Canada, a DCTV upgrade card for CDTV (for CDTV video slot)
- Now advertised in U.S.A. magazine, the A3000T/040 - a tower A3000 with '040 on a card in the CPU slot, 5 megs of RAM, and a 200 meg HD.
- *AmigaVision 3.0 Professional*. CDTV support, improved animation, more effects and improved music.

ProWrite 3.3

New Horizons is shipping an upgrade to *ProWrite*. Version 3.3 has many enhancements over 3.2, including support for Softlogic's *HotLinks*. This is a dynamic data exchange system that gives you close integration between *ProWrite* and other *HotLinks*-capable programs. For example, you can edit text in *ProWrite* and have it automatically incorporated into your desktop publishing system, or change graphics in a drawing or painting program and have the changes automatically brought into *ProWrite*.

Graphics support is improved - you can now have text automatically wrap around pictures, either block-style or following the picture's curves, and with an adjustable offset. Picture handling is better with the ability to name pictures and search for them in your documents. There is precise control over a picture's location and size.

Print preview offers a reduced view of each page of your document, to see on the screen how your final layout looks. You can now specify any font size for your text, not just those that are installed on your system - especially useful if you are using outline fonts or printing on PostScript printers.

Clipboard support means *ProWrite 3.3* can exchange text and pictures with other Amiga programs through the Amiga's system clipboard. A large number of new macro commands have been added, giving you virtually complete control over *ProWrite*'s operation through AREXX.

Full support for new features of Kickstart 3.0 allow you to open up a work screen with up to 256 colours on machines with the new Amiga graphics chips. Other improvements include; document password protection, an optional vertical ruler, and much faster PostScript picture printing. *ProWrite 3.3* is now shipping, with a new suggested retail price of US\$99.95. Registered owners will be sent upgrade information in the mail.

Softlogic Hotlinks

Hotlinks allows you to share files (images, text or clip-art) between programs via intermediate files which are handled by the *HotLinks* system. Benefits include not having to exit applications, or manually import or export data - *Hotlinks* "knows" when an item (like an image) in a document has changed, and will correctly deliver the goods when the output is generated. *Hotlinks* keeps track of the latest version of your files and maintains them as up-to-date. *Hotlinks* is a very exciting capability newly added to the Amiga by Soft Logik.

HotLinks Editions 1.1 is a bundle of three programs: *HotLinks*, *BME* and *PageLiner*. *PageLiner 1.1* is a text processor which allows you to enter and format text. It features a fast and powerful spell checker to which you can add your own words. Version 1.1 allows you to format text with tags, fonts, styles and sizes and to configure the program from the new Settings menu. *PageLiner 1.1* is Workbench 3.0 and Locale compatible. *BME 1.1* is a BitMap Editor which can be

used to touch up and crop bitmap pictures. It loads TIFF, IFF ILBM and GIF pictures. Version 1.1 features a built-in autotracer to convert bitmap pictures into IFF DR2D structured drawings. *BME 1.1* is Workbench 3.0 and Locale compatible. *HotLinks Editions 1.1* retails for US\$150. It is available for only \$110 to registered owners of *PageStream*, *ProWrite* and *ImageMaster*.

Imagine 3.0

Here is a partial overview of some of the new features planned for *Imagine 3.0*. This information was extracted from Impulse's own newsletter. Look for version 3.0 early in '93.

"Deformations - With a whole bunch of work you can Twist, Taper, Bend, Shear and in general try and warp the shape of an object into other shapes. Even using magnetism is not as exact as most of you would like. Thus we have included the ability to deform objects in a very precise manner. Now you can make that jello mold wiggle.

Need lots of Memory?

GigaMem virtual memory enhancement system allows your Amiga to utilise its unused hard drive space as RAM with no additional hardware. This powerful utility (commodity) allows you to run RAM-hungry programs such as *Art Dept. Pro*, *DPaint*, *CanDo*, *Audiomaster*, and *Pagestream* without running out of memory. While fully accessible at any time, its unique features are completely transparent to system software and all subsequent programs. *GigaMEM* works on all Amiga 020/030 based platforms with MMUs operating under KS2.04 or higher, ensuring future software compatibility. If you are in the need of more RAM but don't need the high price RAM chips, *GigaMem* provides an efficient and cost-effective way to expand your machine's memory.

Written in 100% assembly language, the program utilises special disk caching routines, making it significantly faster than a conventional virtual memory system. Easy to install with provided software provided. RRP is US\$149.95. For local availability, contact Desktop Utilities on (06) 239 6658.

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"3D Real Time Window Display - To be real honest we aren't that big of fans of real time 3D window displays. However many of you are, and after all this software is for you. Now you have the option of moving in real time around the perspective window in the different editors. We sincerely hope that this makes your work easier and faster.

"Symbolic High Speed Animation - When you are in the Stage Editor it sometimes becomes very boring to watch the wireframe animation process chug away. Now with a new process of using a more symbolic representation of each object in the animation, you can watch the animation in "REAL TIME". (Special Note ... The head programmer, Zack, does not like the phrase "real time", he will no doubt suggest that it is fast but not yet real time.) At any rate it will be much faster for those who just want to get a feeling of the timing of the animation.

"Soundtrack - The process of making an animation stems from a good storyboard and a great sound track. Sound can be music, sound effects or vocals. In the Action bars there will be the ability for you to read a sound file and make sure that your timing is right as it relates to your sound track. This sound bar will not be an editing bar, it will simply read files that you have already digitized. There are plans to make these sound files part of the animations as well. However we aren't sure of how we are going to cram all that stuff into the animation process without eating up all of your precious memory. We will work on it, promise.

"Pop Up Actors - Over the last couple of years we have wanted to make the action information for each actor POP UP in the Stage Editor without having to go back to the Action editor to make changes to that Action and Actor Line. Now you will be able to have an actor's actions simply show up in the Stage where you can make changes, additions etc.

"Time Line - Most of you have asked for Cut, Copy and Paste function in the Action Editor. Unfortunately this has been almost impossible with the present system that is used in Imagine. We have solved this by changing the reference to frames in the Action Editor to a Time Line. Now making Cut, Copy and Paste functions work is much simpler. This will also give you an even more precise con-

trol over the duration of your animation.

DCTV - We sort of blew it with DCTV. In the present version of *Imagine 2.0*, we only support 4 bit plane images. Many of you have told us of the errors of our ways. We have with 3.0 included 3 Bit plane support also.

"Speed Controls and More - Although you can make objects and groups move on a time line and speed up as well as slow down, it is not real easy to compute a good "EASE IN or EASE OUT." So we have made a really snappy Graphic interface which allows you a time line curve so that you can visualize the speed of objects across a time line.

"Bones - This may be the most unique and exciting new aspect of IMAGINE. Imagine if you will having the ability to manipulate objects as though it had a real skeleton. The cycle editor has many new features that are very useful, however it is difficult to make a human form and have it move in a fluid motion. By using morphing as well as SPLINE control you will be able to make objects move as fluid as the real thing. Bones is a sophisticated extension of Conform to Path. If you have played with the power of Conform to Path you will have a better understanding of the power of this new feature.

"And there is more - Yep, there is more, but like a good trailer for a movie, we can't give away the total plot, not yet at least. The next newsletter will devote itself to making sure that you know about all of the new features."

CanDo 2.0

Completely revised documentation, along with developer oriented enhancements, provide easier access to CanDo 2.0's extensive feature set for authoring multimedia kiosk information systems, presentations, video productions, utility programs, training systems, and other custom development projects.

Yes folks, the new version includes many enhanced developer tools and a completely new user manual designed to simplify understanding and access to CanDo's extensive feature set.

Along with a set of new introductory tutorials, the 400-page, fully indexed manual contains more and better explanations about authoring, scripting and

Local Source : Netware Client Software

Oxxi's *Netware Client* package is now shipping for the Amiga. This software allows Amigas to hook into a Novell Netware network with Macs and PCs. The server must be running *Netware 2.15* or higher. The Amiga retains all multitasking capabilities and Oxxi includes a number of Amiga-specific network utilities. Price depends on the number of Amigas. For more information call GP Software (07) 366 1402.

database design, and does an overall better job of giving the user a tool to unlock the potential of CanDo.

On the software side, a number of additions to CanDo 2.0 have been added to reduce developer time and effort, and increase usefulness of CanDo applications. One of these improvements is Script Bookmarking. Frequently requested, Script Bookmarking speeds development by providing a convenient way to return to certain scripts in just one or two keystrokes — an extremely useful tool when developing large scale applications.

Another addition in CanDo 2.0 is SuperDuper, a timesaving utility which lets you automatically insert complete spreadsheet-style columns and rows of objects (buttons, fields or sliders) into your applications. Also supported is the DOS Notify function under Kickstart 2.0, which is a more efficient way to tell the operating system to watch for specific file system changes.

Also new to CanDo 2.0: an Object Layer Tool, which lets you change the hierarchy of objects and Bug Basher, an all new script test and verification suite which significantly improves error-checking on scripts. And, so that developers don't have to waste time manually defining and editing the location of documents or tool types, CanDo now comes with a Configuration Utility that lets you do all of these tasks using one simple interface.

CanDo 2.0 gives you better control over brushes and brush anims - including a single-step control - and better control over audio: you can stop and start any one of the Amiga's four sound channels separately, without affecting the others.

For developers working with 68040-

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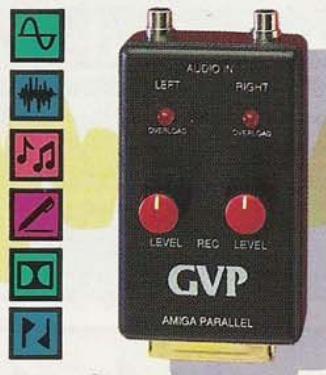
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based systems like the Amiga 4000, CanDo 2.0 now fully supports the 68040 Copy Back mode. This allows the 68040 to fully use its own cache memory, for a 20% speed increase over normal 040 operations (depending on your application), already three times faster than 68030-based Amigas.

Other enhancements include: User definable grids (with a snap-to-grid option); Improved online help; Full support for international characters (Spanish, French, German and Italian); Support for images up to 1700 x 2200 (RAM permitting), such as 200dpi faxes; Support for scripts in excess of 1000 lines (limited only by memory); More efficient memory usage.

"Our intention is to produce the best possible tools for multi-media application developers," says Tim Martin, Vice President of INOVAtronics. "The newest version of CanDo was designed as much by professional developers using the product, as it was by the programming staff at INOVAtronics."

CanDo 2.0 is available now, and carries a retail price of US\$199.95. Owners of CanDo 1.6 can upgrade for US\$50 (plus \$5 for shipping). For owners of version 1.5x, the upgrade costs \$65 (plus \$5 for shipping). Versions prior to 1.5 can upgrade to 2.0 for \$105 (plus \$5 for shipping). For more information contact Desktop Utilities in Australia on (06) 239 6658.

Superbase Upgrades

Superbase Professional has been upgraded from version 1.01 to 1.2, correcting known bugs in the older version as well as enhancing ARexx control, printer support and DML commands. Upgrade price to registered users is US\$20.00. *Superbase Personal* has been upgraded to include logical fields, query across relationships and multiple files, store and recall report and query formats, definition for up to 40 function key commands as well as fixing known bugs and other improvements. Upgrade prices are US\$65.00 for registered users of *Superbase Personal*, and US\$50.00 for registered users of *Superbase Personal 2*. *Superbase 4 LAN* adds the ability for *Superbase Pro* to work over a network of computers using either *Superbase* for the Amiga or SPC's *Superbase Windows*. *Superbase Pro Developer's Extension* adds a runtime module to *SBPro 4* which allows stand-alone applications to be written. The runtime-module is an unlimited license and costs US\$399.95.

For more information contact the Oxxi Sales Dept, PO Box 90309 Long Beach, CA 90809-0309 USA or IDD to VOICE: 310/427-1227 FAX: 310/427-0971.

TruePrint/24

ASDG has announced the availability of *TruePrint/24*, a new stand-alone utility which outputs 24 bit-plane colour or 8 bit-plane gray scale images on Preferences supported printers. *TruePrint/24* can output prints of any size from single pages to outdoor signs. You can even print graphics on non-graphics printers (such as daisy wheels). *TP/24*, listing at US\$89, can produce stunning prints with 16 million colours (24 bit-planes) on most Preferences supported colour printers without the need for custom drivers. *TP/24* can also print 256 shades (8 bit-planes) of gray on black and white devices such as laser printers. For more information contact (06) 239 6658. □

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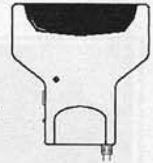
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World of Commodore, Pasadena

Show Report + AGA Software Upgrades + New Products

by Charles Hill, AM-Report International

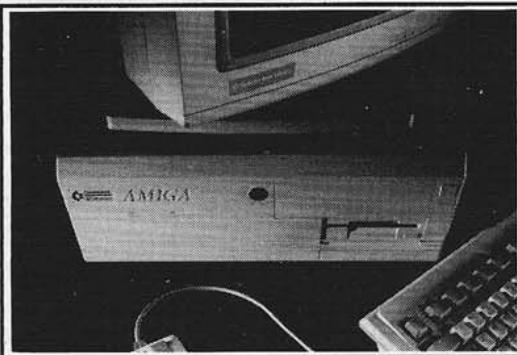
World of Commodore Amiga, Pasadena USA, September 11-13th saw a deluge of information and new products. Over 50 different Amiga vendors showed up to display their latest gear. New versions of popular software that was made compatible with the A4000/AGA machine included: New Horizon's *ProWrite 3.3*; Softwood's *Final Copy 2*; and Black Belt's *Imagemaster* just to name a few.

ProWrite and Imagemaster announced support for SoftLogic's Dynamic Data Exchange system - *Hotlinks*. SoftLogic announced an update to *Hotlinks (v1.1)* as well as their *Bit Map Editor (BME)* software.

With Commodore's new announcements (networking APIs; multi-parallel device support; *CrossDOS*; *ARExx*; retargetable graphics; modular processors; DSP; SCSI-2; PostScript support) coupled with *Hotlinks* and GigaMem's new Virtual Memory system for Amigas with MMUs (distributed by Innovatronics) the Amiga has near everything available for personal computers/workstations.

Commodore - Positive New Approach

After years of tight-lipped secrecy, Commodore not only announced a raft of new products to the US market (A600, A600HD, A4000, A570, AGA, *AmigaVisionPro*, AmigaDOS 2.1, AmigaDOS 3.0), but did a complete 180 degree turn on announcing future



Amiga 4000

plans. Of course, we had already seen some of what was new thanks to the Sydney World of Commodore Show, in July this year.

Until now, Commodore's policy has been "if it isn't shipping, it doesn't exist". However, at WOA Commodore said that they would ship more new products in the next six months than anyone could believe possible. This includes AmigaDOS 3.1 (with network extensions and DSP support), and a Digital Signal Processor upgrade for the A4000.

They also mentioned retargetable graphics and Postscript support in AmigaDOS 4.0 as well as some nifty deals on CDTV (free with a new A3000 or US\$599 for current Amiga owners).

A570 CD-ROM Drive

Now shipping in Australia, the A570 is CDTV for the A500 - a high capacity read-only storage device. The drive accepts standard 5" compact discs in a CD caddy and plays all CDTV (R),

audio CD, CD+G, and CD+MIDI discs. It can also read industry-standard ISO-9660 CD-ROM discs. Interestingly, no mention was made of an A670, or a CD-ROM drive for the A2000.

However, Commodore is pushing CDTV as the CD-ROM drive for A2000, A3000 and A4000 machines. Current Amiga owners can get a CDTV unit, parnet and cable for US\$599. In the US, free CDTV's are being given away with new A3000s!

AmigaVision Pro

Two years since the original launch, *AmigaVision* has undergone a major upgrade which builds and expands on the visual programming environment. The new features include support for the CDTV player, speed and memory improvements, and enhancements to the authoring environment. In addition, a freely redistributable runtime module has been included, enabling flows created in *AmigaVision* to be played back without loading *AmigaVision*.

The player uses a mere 270K of RAM! Beefed up device support now includes CDXL, the CD-ROM animation routines for CDTV. Commodore is pushing *AVPro* as a development and delivery method for CDTV.

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AmigaVision Professional Specifications

CDTV (R) Support features:

- Playback of CD-XL Motion Video Files
- Plays CD Digital Audio tracks
- Cursor and Jumping Highlight Modes
- Reads CDTV IR Controller
- Full Support for CDTV Preferences
- Control MIDI out files to MIDI or Amiga

Video Control Features:

- Supports full-motion video
- Supports Genlocks
- On-screen videodisc controller
- Video setup and configuration
- Supports Sony, Pioneer and Phillips laserdisc players, NEC PC-VCR, Panasonic TQ3032F, Sony Umatic 9 Tape Players
- Supports drivers for custom players

User Interface:

- Primary Interface(s)

Direct Manipulation of Icons

Requester Boxes

- Presentation in flowchart format
- User input from keyboard, mouse, joystick or touchscreen
- Auto-open and reduced-size icons

Graphics and Animation:

- Combines Text and Graphics on screen
- Uses Amiga standard IFF ILBM files as foreground and background
- Simultaneous playback of Animation and Audio

- 34 Transitions with four speeds 17 palette/ resolution independent- Visual Display Elements: Graphics, Text, Animation, Video

Sound:

- Supports Amiga Stereo Audio
- Supports Amiga standard SMUS files with tempo, dynamics and chord support
- Digitized sound in standard 8SVX format
- Speech synthesis and text-to-speech conversion
- Pre-loading of audio and streamed-in animation and sound for increased display and playback speed
- Audio Display Elements: Digitized Sound, Music, Speech Synthesis

Database:

- Integrated into AmigaVision
- dBase III (R) data file compatible
- up to 10 files open simultaneously
- Read and Update functions
- Variable definition and manipulation
- Define data input forms
- String, numeric, data & Boolean operations

Visual Programming:

- Features: Flow Control Subroutines
- Interrupts
- AV Engine
- Libraries of Events
- Object Editor
- Conditional Statements

- Unlimited Number of Hit Boxes/Buttons per Screen

- Unlimited Text Windows

- Hypertext Browsing

- Runs external programs via AReXX

- Chaining of programs

- Selectable memory constraints

- Create runtime modules

- Relocate applications

- Name, Position and Move objects including animation brushes

- Define Paths and Traversal Options

Runtime Player:

- Includes freely distributable Runtime Player

HARDWARE REQUIREMENTS:

- Minimum Delivery System: Amiga computer with 2 MB RAM
- Suggested Development System: Amiga Computer with Hard Drive and 4MB RAM
- Runtime Player Requires approx. 270KB, 1 MB RAM recommended

AMIGAVISION PROFESSIONAL (PN: AS251) INCLUDES:

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- Demo Disk with Guided Tour booklet
- Examples Disk
- User's Guide
- Runtime Player
- Requires AmigaDOS (TM) 1.3 or higher

are all well and good, but what can you use them for? Here's a few products which were demonstrated at the show which now offer support.

● *Imagemaster*, an image processing package from Black Belt Systems, really blew some minds with their AGA support.

● *ProWrite 3.3*, a popular word processor from New Horizons, supports AGA, AmigaDOS 2.1 and 3.0, as well as SoftLogic's *Hotlinks*.

● Electronic Arts has officially announced an upgrade to *Deluxe Music Construction Set* for the Amiga. Among other things, *DMCS 2.0* will take advantage of the new hardware features of the Amiga 4000, will support ALL screen modes, and will include a freely distributable *DMCS* song player! It does not look the same on the screen as the original *DMCS*.

● *Final Copy II* on the AGA chipset

looks fantastic. According to one of the guys who wrote it, an upgrade mailing should be out. This wordprocessor seems to be working its way towards the type of high end package the Amiga needs - but then so do a few others.

GVP

CineMorph, demonstrated on video, brings the features of a high-end commercial morphing system to the Amiga. You can warp single images, morph (change shape) between two or more images, and even create sequences of full motion morphs.

According to GVP, *CineMorph* has exceptionally fast rendering that can be fully automated to save you time. You can preview results within *CineMorph* or render directly to Amiga formats, HAM-E, DCTV and 24-bit IFF with controls provided directly in

CineMorph. The system also supports full 24-bit output for professional needs on framebuffers such as the IV24.

Using a dual window interface, *CineMorph* takes this one step further by making these windows fully intuition based to allow images to be shown and morphed in their correct aspect ratio. These windows can also be enlarged for precise editing. Amiga style conventions are followed in all areas.

Other features include the ability to warp images for comic effect, merge similar scenes for film or video to eliminate bad edits, and create full motion morph sequences for cinematic or video effects using *CineMorph*'s unmatched controls for automating the creation of full motion sequences.

GVP say *CineMorph* represents the state of the art in morphing software on the Amiga. It's currently being used by high profile companies in several pro-

G-Lock Specifications

- Software control panel (Intuition based) with full AREXX and CL interfaces.
- Multiple audio/video Setup memory locations.
- Audio Processor with two audio inputs (software switchable or mixable) with software control of Volume, Bass and Treble.
- Two composite video inputs (software switchable) or one Y/C (S-Video) input.
- Simultaneous composite, Y/C (S-Video), and RGB output
- Transcoder ability
- RGB output can be software switched to provide YUV (M-II/BetaCam) output.
- Video Processor (Proc Amp) provides real-time software control of video attributes such as brightness, contrast, saturation, hue, sharpness, filtering, gain, etc.
- Special color filter circuit for special effects.
- Can convert most SECAM video sources

into PAL video (VCR quality).

European users.

- Keyer modes include Amiga only, External Video only, Overlay, and Inverse Overlay modes PLUS control of Amiga ECS/IAA special effects.
- Operates as a software controlled and adjustable electronic RGB splitter for direct operation with the NewTek Digi-View or other slow-scan videodigitizer.

AREXX scripts included.

- Works with the Display Enhancer, Flicker
- Fixer, FlickerFreeVideo boards for simultaneous genlocked video and de-interlaced Amiga graphics output.
- Transition controls using AREXX (example *AmigaVision* flow and AREXXscripts included).

ductions in Hollywood, New York and Florida, as well as many other companies for their advertising, multimedia, and commercial works. See some of their testimonials below:

Jennifer McKnew of The Post Group in Hollywood, CA says, "CineMorph's interface is extremely professional and its speed of rendering is exponentially faster. It's great to see someone writing software with the professional in mind. The capabilities of this program are mind-boggling, especially when you consider that as recently as a year ago, true morphing was beyond the budgetary reach of a number of my clients."

AmigaWorld, in their October 1992 issue says, "Morphing in [CineMorph] closely resembles the techniques used by high-end special-effects systems."

Howard Schwartz, President of HJS Studios and Creative Director and Partner with New Media Associates of New York, NY said, "I have looked at and worked with every major morphing package on every major platform, and I can confidently say that CineMorph matches their quality, is comparable to their speed and blows away its competition with its ease of use, level of production, and its elegant user interface.

"Full motion morphing have never been this easy and productive. Productivity is the key word in lucrative graph-

ics production, and *CineMorph* is the definitive solution."

G-Lock - GVP's new low-cost genlock, was also launched. This unit is a highly integrated, very flexible external genlock that can be used with all Amiga models in both NTSC and PAL video standards, as well as SECAM conversion. The G-Lock offers a video and audio solution to the video enthusiast or producer. (See specifications.)

GVP also talked about *Mirage*, a world-class image processing program, which will ship just as soon as the manual is finished.

ICD

In Australia two years ago, ICD were showing 4.5 minutes of *Star Wars* (where they escape from the Death Star) running from their new Trifecta hard drive. Full screen, lores, nolace HAM at 30 fps with audio on a stock Amiga 500 w/1Mb of chip RAM. The drive was transferring data at 1.9Mb/sec - total size of the video was 350K.

SAS

Although most Amiga owners probably don't have a C compiler, in the end everyone will benefit from their

continued enhancements - better tools make program development faster and easier. For those who don't know, Commodore has a new hypertext system that SAS C 6.0 uses. This might become a standard part of the operating system.

CSA

Computer Systems Associates (CSA) is readying an all new accelerator, the Derringer, that breaks speed and price barriers at the same time. The Derringer is a new 25 Mhz 68030-based accelerator that gives A3000-level performance for US\$249.95 - about the same price as many 68000-based accelerators - while still running three to five times faster.

The Derringer supports the addition of 1, 2, 4, or 8 more megabytes DRAM together with a 50 Mhz 68881 or 68882 math co-processor. Additional 16 and 32 megabyte DRAM upgrades will be possible as future DRAM technology develops. The Derringer is a self-contained, single-board plug-and-play unit that replaces the 68000 CPU inside your Amiga. It will work with any A500 or A2000 and is scheduled to ship by the year's end.

Innovatronics

Finished just before the show, *CanDo 2.0* features script bookmarking - allowing you to mark places in your script for easy return; SuperDuper - a utility that allows you to insert spreadsheet-style columns and rows of objects into your applications; Object Layer Tool - which allows you to change the hierarchy of objects - and an error-checking utility, Bug Basher. (See Notepad for more information.)

Centaur/Opal Technology

Colour was the name of the game at the Centaur booth - over 16 million of them, to be precise. The OpalVision 24-bit graphics board, currently shipping, was the centrepiece of this display. If you've missed the reviews, the

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OpalVision board offers 24-bit colour now, with a bundled paint program, and promises Toaster-like capabilities in the future through add-on modules.

Sunrise

You couldn't miss the Sunrise booth; it could be heard from any point on the floor. Sunrise was busy demonstrating their new 16-bit audio card, the AD516. This board features eight tracks of sound, a time code reader, and a Digital Signal Processor on one card, and is bundled with the Studio 16 sound editing program.

Sunrise plans to release the DD524 Digital Audio I/O board within six months. This board will feature direct import/export of digital audio between the Amiga and a Digital Audio Tape or CD player.

Merit

Over in the Merit Software booth, football ruled. *Tom Landry Strategy Football*, that is. In an interesting twist, this game - co-designed by Tom Landry - was developed on the Amiga and then ported to the PC. It features a 2-player modem option (with a chat mode) as well as VCR-style instant replays. If the game gets too tough for you, you can always consult with the master through the "Ask Landry" option. *Tom Landry Strategy Football* is expected to ship within a month.

Digital Micronics

The Digital Micronics booth featured two things: Speed and More

Speed. The Vivid 24 board offers 24-bit graphics, resolutions as high as 2048 X 2048, and the ability to perform operations at speeds of up to 160 million floating point operations per second. That's faster than a Silicon Graphics 4D workstation costing around US\$195,000!

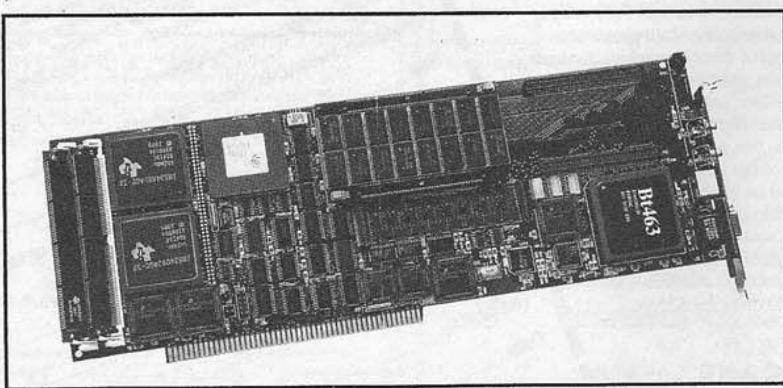
The modular design of this graphics co-processor allows you to add upgrade modules, ranging from math co-processors to a video effects generator.

The Digital EditMaster board features editing speed. Using full-motion JPEG Technology to capture real-time 30 fps video direct to hard disk, the Digital Micronics stand attracted a huge crowd. Although they did not have a software interface for the board, they were using two boards to show *Terminator 2*. One board was compressing (5-10:1 - 80-90:1) and the other board was decompressing in real-time. The output was then sent to a big screen television. Possible outputs are NTSC, PAL, and SVHS.

Real-time compression to a harddrive is possible if you have a fast, big enough drive. 30:1 compression and a one gigabyte drive will hold about 30 minutes of video.

This board is also fully integrated with the SunRize Industries sound boards using SMPTE time code for simultaneous digitizing and editing of both the audio and video track. Suggested List Price: US\$2495.00. The EditMaster board can be connected to the Vivid 24 board for real-time 24-bit image transfer from hard disk to screen.

Most frequently-heard expression at the show: "I want one!" □



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Future of the Amiga

With so much new, what does the future hold? At the Pasadena World of Commodore Show, a seminar by Commodore revealed some of what we can expect in the next year or so. So hold on to your keyboards as we head down the time line into the mid 90s and the ultimate Amigas ahead!

If you think the current Amigas could be better, you're right. How much better? Commodore is aiming at two types of machine categories: low end and high end. Already we've seen the first of Commodore's new generation appear - the Amiga 4000. But there's more in store.

Commodore is no longer going to sit on the sidelines and play catch-up once every seven years. They plan on keeping in touch with the market and the industry and being one of the leaders in innovation. This means that when Motorola has a 100 MHz CPU, Commodore will be right there ready to use the technology.

Entry Level

In the future, the low end Amigas chip set will consist of two VLSI custom chips with a total of about 100,000 transistors. In comparison, the current Enhanced Chip Set has a total of about 60,000 and the new Advanced Graphics Architecture chip set has about 80,000 transistors.

Chips will be surface mounted - CMOS for low power consumption, smaller space requirements and cheaper manufacturing. The low end set will be able to address 32-bit DRAM and have a 57 MHz programmable pixel clock. You can store data on a 4 Mb floppy drive; use the FIFO, high-speed serial port; animate the 16-bit, 65,536 colour display from a 24-bit palette (16.7 million to choose from). A new highspeed blitter will be capable of handling 800 x 600 x 8 (256 colour) screens in a 72 Hz refresh mode that is twice as fast as what can be handled now at lower resolutions. Best of all, there will be backward compatibility with the ECS and AGA as a priority.

Top End

The high end stuff looks even better: a total of four custom VLSI chips with a

total of between 750,000 and 1,000,000 transistors. Again, surface mount and CMOS for the same reasons as above. Look for 32-bit or 64-bit VRAM for very fast performance; a programmable pixel clock with rates between 57 MHz and 114 MHz (current AGA is 28 MHz); 1k x 1k video resolution using dual-ported VRAM (add more RAM to get more resolution); built-in frame grabbing; screen promotion; super-fast serial ports; chunky-pixel mode graphics (in addition to straight bitplane); on-demand DMA; 24-bit true-colour displays; capability of one blitter per bitplane (yowza!); 32-bit blitter with over 8x current performance; 12x to 20x the current bandwidth; 8-channel, 100 KHz, 16-bit audio; as backward compatible as possible; 32-bit processor-independent processor slot (RISC was mentioned a couple times!); built-in graphics compression ... and the list goes on.

Coming Soon

- Design facilities have been improved; Commodore is out sourcing much of the actual manufacturing to companies like HP and VLSI. Apparently the Commodore Semiconductor Group (CSG) is only being used for making 6-micron parts for C64s (selling like hotcakes in Europe and the far east). The new CMOS based designs will mean an Amiga laptop is more likely.

- A Digital Signal Processor (DSP) upgrade for the A4000 is expected within six months. This will be in the form of a CPU board replacement. Since the A4000's 68040 is on its own daughter board, you can replace it without messing with the motherboard. The DSP will reside on this board with the CPU.

- AmigaDOS 4.0 will have retargetable graphics - so the graphics hardware can change or be added to without having to alter the software. CBM is

looking for developers to volunteer for a 'spec' committee. AmigaDOS 4.0 will also have "full PostScript capability".

- AmigaDOS 3.1 will have network extensions, printer/file sharing and support the DSP. AmigaDOS 3.0 can double-buffer intuition screens and can swap buffers at a speed of more than 2000 per second.

- A tower version of the A4000 is being worked on.

- Zorro III, SCSI-2 before Christmas; possibly migrating to the motherboard at a future date.

- Commodore stated that they will be putting the AGA chipset in the entire product line in the future. This seems to include the A600 and CDTV. This makes HAM-E, DCTV and to an extent some 24-bit boards, totally obsolete and is perhaps the most significant announcement for the mass Amiga market.

- A 32-bit, SCSI-2 board is coming from Commodore before Christmas; a Digital Signal Processor in early 1993; retargetable graphics; full PostScript support; system-level network support; full-motion MPEG video; RISC processors; CDTV will be cost-reduced, enhanced and merged into the Amiga line.

- With network integration, many people believe that Commodore's TCP/IP software will have the upgrade (v2.0) merged into the OS instead of releasing it separately.

Issues

Jim Dionne answered some questions at the Keynote Address. When asked why *PrintShop* wasn't available for the Amiga, he said this type of question comes up a lot. He would like to see all software run on the Amiga, except *Windows*, which drew a round of applause from the audience. One way to get software ported is to pay the developer a lot of money to do it, which Commodore isn't in the position to do. He said the software that's available is a reflection of what the installed user base wants.

On the subject of the C64, it's still selling around 700,000 in Europe, so Commodore is still making them. Will the A500 be phased out with the new A600? Sales figures will tell them what to do, Dionne said. (According to rumours, production has in fact ceased.)

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Why did Commodore let the education market get away from them and let Apple and IBM get it? Commodore wasn't in the position to give millions of dollars in hardware and discounts away like the others did. Now with major price wars, and margins getting smaller, the three companies are more on an equal footing, Apple and IBM can't inject such large cash amounts any longer. (Although Apple and IBM do have the installed base, and C= doesn't). Dionne said that he would love to have the 65% education market share in the US that he saw when he worked in Canada.

What about Trade Up programs to new AGA computers? Dionne says they have had success with these programs in the past, so given Commodore's "whatever sells" philosophy ... (Commodore Australia, are you listening?)

Why no Amiga laptops? Basically, the old chips use too much power to make a laptop feasible. Newer chips will use NMOS technology and consume less power. Also these new chips will not be made by Commodore (but they are designed by Commodore). The Lisa and Alice chips are being made by three different companies. Three sources should prevent supply problems. That about wraps up the keynote address.

He goes on about his "five dollar network" (the cost of the MIDI cable used to network the machines) and fifty cent textbook (since such a large part of the instruction is on computer, the "textbook" is photocopied) and he complains of sometimes not being able to spend all of the \$750,000 in grant money from Nabisco that is funding this three year project because the hardware is so cheap.

A positive view of the Amiga's potential, current power and future growth are going to make a big difference.

What does it all mean?

Commodore is doing a lot of talking. For a company that, for the last year, has done a fair imitation of a clam, this is real landslide of information on "future" products. By announcing a DSP upgrade for the A4000, Commodore is addressing concerns over upgrades to the Amiga's sound capabilities - which hasn't changed since 1985 and the A1000. It also answers the questions that arose earlier this year when it was reported CBM had negotiated with a major manufacturer for rights to use their DSP.

Retargetable graphics, and what looks like Display PostScript (a la NeXT) would justify bumping AmigaDOS version numbers. The A4000 (with a 68040 and custom chips) should be more than able to handle Display PostScript quick enough (which the early NeXT machines and their 68030s couldn't).

This bodes well for the Amiga. Now, if Commodore follows through and promotes the new AGA and Amiga 4000, they could be in a good position as a major player in the computing industry. □

People of the Future

Ed Green, a teacher of high school algebra, geometry and chemistry is using CDTVs networked into an A3000. He had a demo setup at the show. The system is amazing, and could revolutionise teaching. His enthusiasm for this system is very catching.

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Both upgrades require Amiga 500, 500+, 1000, 2000 or 3000, Workbench 1.3 or 2.0, 1 MB RAM (additional memory recommended). Two Disk Drives or Hard Disk recommended.



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Amiga DOS 2.1 and 3.0

World of Commodore, Pasadena, saw the announcement of two upgrades to Amiga's operating system - with a few hints on what to expect in the future!

As if the arrival of Workbench 2.0 was not enough, Commodore have been quick to improve Amiga's operating system. Version 2.1, which I am now running on my Amiga, has some vital improvements. Many are small, behind the scenes bug fixes. The more important improvements include:

MS-DOS File Compatibility

Consultron's *CrossDOS* has been built in. To activate it you simply drag the PC0: device icon from storage in the DEVS/DOSDRIVERS drawer. Simple! No more fiddling mount lists. From there on, DF0: is shared with PC0: and you can read, write MS-DOS disks from Workbench or any other program. If you select the PC0: icon and choose format, AmigaDOS knows it's an MS-DOS disk and formats it accordingly.

The benefit of this feature could be a key to Commodore selling the Amiga against MS-DOS machines. Many Amiga owners are now able to bring home text, database or spreadsheet files.

Text files can be loaded into any word-processor and resaved as text to load onto a PC. Spreadsheets in *Lotus* format can be imported and exported from most Amiga spreadsheet programs such as *Maxiplan* and *Professional Calc*. *Dbase* files can be read by spreadsheet and database software, including *Superbase*.

Installing printer drivers, monitors and other special DOS devices is handled in the same way - just drag the appropriate icon into the right drawer. Next time you boot up, Workbench will mount the devices installed.

New Preferences

Many of the preference programs have extra buttons, new features and different presets. A new one, Sound, lets you define either a beep, or sampled sound to play when an error occurs. You can adjust the volume, pitch and length of the beep.

Locale defines where you are in the world, and lets you choose from a number of possible system languages. For example, if I select Italian, all

Workbench 2.x based programs will now have a Salva button instead of a Save button. Cute for us, and a must for the European market.

Postscript Support

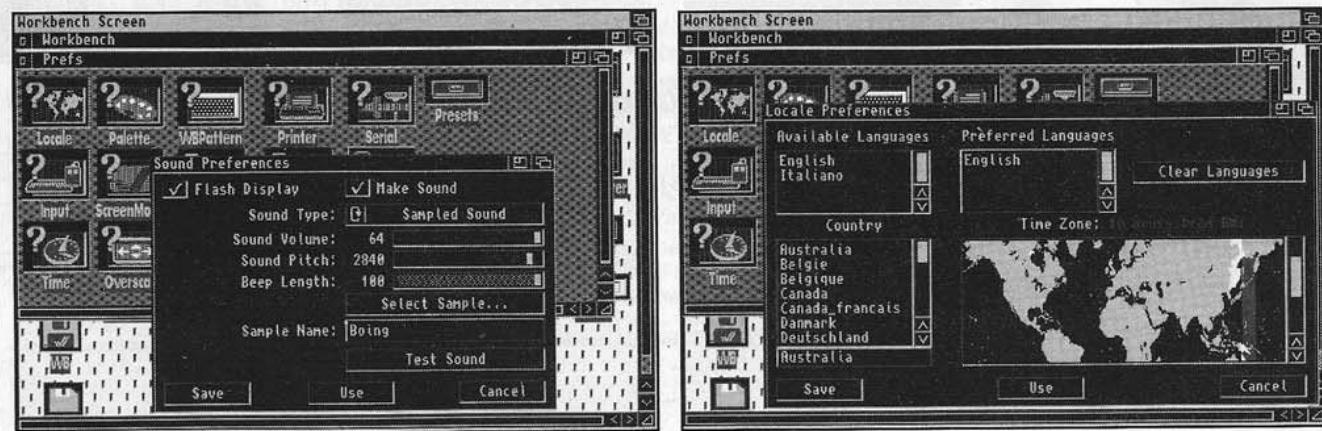
A preferences Postscript driver offers full support from any program for Postscript printers. A separate Postscript printer preference program lets you adjust special settings. I've found most software seems to work happily with the driver, although thankfully many programs now have Postscript support built in anyway.

AmigaDOS 3.0

Yes folks, version 3.0 is also out, with all the above, plus full support for the new Advanced Graphics Architecture chip set featured in the Amiga 4000. At the Pasadena show, a demo of 3.0 showed a multi-viewer that could display many different types of pictures on a 24-bit workbench. The viewer was configurable with different loaders, so while anims weren't supported, Peter Churna said these could be developed.

They've implemented a colour wheel for palette selection in 24-bit, and hope it to be used by other developers (that may mean it's part of the ASL).

Palette Sharing allows multiple pictures with different palettes to be displayed on the same WB screen, even if it wasn't defined as 24-bit. In other words, the OS is getting smarter about sharing colours and helping re-use col-



our registers so pictures can co-exist on a screen without messing up the colours of the others.

AmigaDOS 2.1 Specifications

New features:

- Dynamic Localization of Programs to different languages and locales
- Includes *CrossDOS* for easy transfer of MS-DOS and Amiga files
- Includes Postscript Printer Driver
- Supports Multiple Serial and Parallel Printer Preferences
- New Preferences Editing
- Motorola 68040 compatible
- Screen mode requester added for selection of screen mode or video mode

Fonts:

- Supports Agfa Compu-graphic Intellifont scalable typefaces
- Includes CG Times, CG Triumvirate and LetterGothic typefaces
- Supports scaling of bitmap fonts
- Better control of font rendering for Desktop Publishing applications

ARexx Programming:

- Includes ARexx, a powerful inter-process communication language
- Can be used to control applications which support ARexx
- Allows the integration of different applications that support ARexx into a single environment
- Ability to launch applications from within other applications

User Interface:

- Professional three-dimensional look
- Improved ease of use and consistency
- Extensively configurable through Preferences Editors
- Standard file and font requesters
- Supports scrolling screens larger than the monitor
- Select Locale/Country by clicking on World Map
- Keyboard selection in Input Preferences

Workbench features:

- All files are accessible from the Workbench
- Files are accessible by name or by icon
- Drag selection of multiple icons
- Includes New Drawer command
- Easier cleanups and positioning of icons
- Icons can be "left out" on the Workbench backdrop for easier access

Other features:

- General purpose installer added with installation activation of Keymaps, Monitors, Printers and DOS Drivers
- Select keyboard from Preferences Editor
- Printer Drivers for popular printers added
- Spline animations on blanked screens
- Support for European monitors
- Enhanced reliability even under low memory situations
- Faster and more reliable floppy disk access

- Improved Icon Editor

Shell Enhancements:

- AmigaDOS commands are faster, more powerful and require fewer keystrokes
- New commands handle environment variables and links
- Cut and Paste in shell windows
- Extended wildcard capabilities
- Backtick feature allows embedded commands within commands
- Shell windows have a close gadget
- ARexx scripts can be run directly from the Shell

ECS features:

- Enhanced Chip Set Required
- 640x480 non-interlaced Productivity Mode (requires 31 kHz-capable monitor)
- 1280x200 and 1280x400 Super-HiRes Modes
- 800x600 requires Multisync
- New genlock features

Hardware requirements:

- Requires any 2.0X ROM-ready Amiga 500, 600, 2000 or 3000 series computer
- Amiga 2500, A2620 or 2630 requires rev-06 or greater ROMs on the accelerator card
- ECS features require optional Enhanced Chip Set
- Contact nearest Commodore reseller for details and installation.

For more information contact your local Commodore reseller. □

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Artificial Landscape

Review: Scenery Animator and Scapemaker

If you can see yourself screaming through the Grand Canyon in an FA/18 or swooping low over your own backyard, these two programs could help make it possible from the safety of your keyboard - George Kimpton explains.

Computer generated scenery, while it continues to amaze us with its increasingly realistic landscapes, cannot hold a candle to nature when it comes to the crunch. However, it's the next best thing for those of us who have a good imagination and cannot stretch the budget far enough to visit the real thing. Two programs which help make it possible are *Scenery Animator* plus the virtually unheard of *ScapeMaker*.

ScapeMaker allows you to take a map of an area you're interested in and convert it to the format necessary for use in *Scenery Animator* or *Vista Pro* - both very good scenery animator/rendering programs. You can then fly or paddle up the Alligator River in Kakadu without having to actually go there.

Practical Uses

These virtual reality style programs have some practical uses too. For example, there are some proposed developments in Excelsior Park, near where I live. Two government departments, who shall remain nameless, are looking at the feasibility of building a massive retention basin for storm water controls and building a multi-lane tollway in or through this natural bushland park.

Understandably locals are divided in their support or otherwise of the projects and most have little or no concept of what the finished projects will look like. Enter you and I with the Amiga, *ScapeMaker* and *Scenery Animator*.

A map and plans for the

project are scanned and converted to provide a picture which can then be brought into *DPaint IV*. Colours are then adjusted for contours and structural items to allow the correct conversion into a 3D landscape DEM file, for rendering in *Scenery Animator* or *Vista Pro*.

We use *ScapeMaker* to import the bitmap image and frame the area of interest. The conversion controls are adjusted for the landscape and it is grabbed. Next the construction structures are also grabbed from another picture and then using *ScapeMaker* the two are combined to create a composite 3D landscape in DEM format.

Rendering

The final step is to use *Scenery Animator* (or *Vista Pro*) to render either single frames or a complete fly through along the roadway or through the bushland. In this way some visual concept is possible of the effects of either construction without the need to actually construct the proposed dam or expressway.

The main edit screen provides a low detail view of the scene to be rendered



Using the Stop Frame Controller, reviewed in the September issue of ACAR, along with a 24-bit frame buffer, it is then possible to create a photo-realistic animated view of the constructed works and their surroundings on a video tape that can be made available for anyone to see. An article in a recent *Amiga World* reported on one Amiga user who used *ScapeMaker* to recreate Mayan ruins on a South American jungle landscape.

Review: Scenery Animator

A minimum of two megabytes of memory is required with Workbench 1.2 or higher and a single drive. Extra memory, a hard drive and an accelerator are recommended.

Scenery Animator comes with two disks - a program disk with standard and accelerated program versions and a second disk containing a series of landscapes. There is no auto hard disk installation provided, but basic installation is pretty easy, requiring only the dragging of icons to an appropriate drawer and the use of an install script icon for assigns and the necessary libraries and fonts. This install script operation is necessary whether working with the hard disk or floppies. The different system setups are explained clearly in the manual.

The manual provides a reasonable guide to producing your first scenery animation. One problem I encountered in the anim tutorial - the key frames mentioned are not on the disk as stated. Well, no matter, the later animation section is easy enough to follow when you create your first real animation. Take care here as even a short anim will chew up a couple of megabytes of hard disk space.

Up and Running

You have two basic screens which contain either the map or a preview of the scene. The map screen allows you to set the direction and angle of view using the mouse or by typing in the appropriate Compass, Pitch and Bank angles and lens lengths. The mouse adjustment is useful as you can actually see what you're getting.

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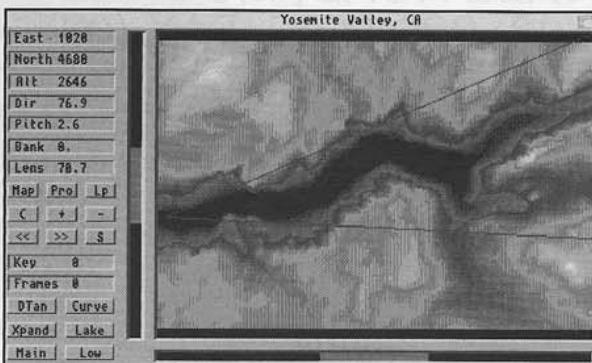
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This screen also is the work platform for animation. Key frames are set up and a path can be set for the anin to follow. Using the "DTan" control the camera is locked to a tangent of the designated path and "Curve" is used to smooth out the path trajectory.

Apart from animating the camera position and direction it is possible to also animate the lens focal length, clouds, altitude and density. However the mind tends to reel a little when the manual talks about animating snow, rock and vegetation levels along with a vertical exaggeration factor (what ever that is), ocean level (tidal waves perhaps) and lighting angles. Needless to say I haven't had the time to try all these out yet.

View Screen

Apart from displaying various operating buttons, the view screen gives a rough polygon preview depicting the camera's actual field of view. It also allows you to adjust the viewing direction and pitch and



Scenery Animator's map screen allows you to create animation paths

permits you to box and zoom into a particular section of the landscape. The angle adjustments can again be set by mouse or entered into requesters.

Clicking on buttons in the main screen opens up control panels or requesters with rendering options. For instance the Land control panel sets levels for snow, rock, soil and vegetation.

There are limitations on the number of land features allowed to be set at any one time depending on whether you are using normal Amiga screen modes or

not. This limitation appears to have something to do with the number of bit planes available as DCTV and IFF24 pictures have no colour or land feature limitations applied.

Other control panels allow adjustments to Light, Water, Sky, Trees and seeding for Fractal Landscapes. These adjustments are pretty comprehensive allowing controls over clouds, waves, direction and angle of lighting. Here in Australia, only two types of trees are available and they are oaks and pine trees, neither of which is indigenous.

Operation is reasonably easy, encouraging one to experiment. My only complaint is the slowness of rendering, even with an '030 accelerator and seven megabytes of memory, it can take two to fifteen minutes per frame depending.

Rendering

With a sequence of 25 frames or about one second of animation, it took about



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five hours to render using the Grand Canyon scene with the default Hi-Res Interlace settings. The wait was worth it, the graphics were stunning. Anyone who saw Dennis Nicholson's demo at the World of Commodore Show on the ACAR stand will know what I mean.

Rendering of graphics can be either in IFF, IFF24, DCTV or PCX formats. Animations can again be in a number of formats i.e. IFF Anim5, IFF Frames, IFF24 Frames, DCTV Anim5 or DCTV Frames. Provision is made in the anim path to avoid or detect collisions while passing over the landscape and to either bank the camera on curves.

Animations created on *Scenery Animator* can be run using the included ShowAnim program or loaded into any Anim 5 compatible software such as *Deluxe Paint*.

Scenery Animator does not seem to have the versatility of *Vista Professional*, and appears to be slightly slower but one thing is for sure it is easy to operate and the graphics are stunning every time. With the detail button selected the rendering leaves little to be desired whereas *Vista*

Pro needs a fair bit of juggling to achieve the same quality of graphics. Overall, well worth the money - I'm glad I bought it, it's lots of fun.

Review: Scapemaker

Scapemaker comes on a single disk with a rather abbreviated handbook and will run on just about any Amiga. It has no special requirements although extra drives or a hard drive and extra memory will improve its operation. Installation on your hard drive is easy using an install icon after which you can run it from either CLI or Workbench.

ScapeMaker is not an intrusive program. After clicking on the program icon you are presented with a two string gadget at the top of the screen. These string gadgets are there simply to keep you advised of the file names you are working on. A drop down menu is used for all other functions such as sizing and grabbing scapes. All functions are serviced by hot keys for convenience.

If you choose to use default settings, operation is very simple. You use the

"Open Image" function to load an IFF image, select the area to be converted, grab the scape which converts the selected area and then save it. This saved scape file can then be used in *Vista*, *Vista Pro* or *Scenery Animator* to produce 3D landscapes or animations.

Adjustable Parameters

Of course a die hard 3D type would never accept the default parameters, although they work quite well in the tutorial, so let's look a bit further.

We have two choices in converting colours to altitude or contours. The first allocates a Colour Number which is specific to each colour in the palette. Thus the number of contours and level of each contour is determined by the location of the colour of each pixel in the palette.

The second method called the colour value mode checks the actual colour value of each pixel between 0 and 4096. I won't go into the mathematics of this method but this has the potential for smoother contour gradations and much better pictures. The only problem is that consider-

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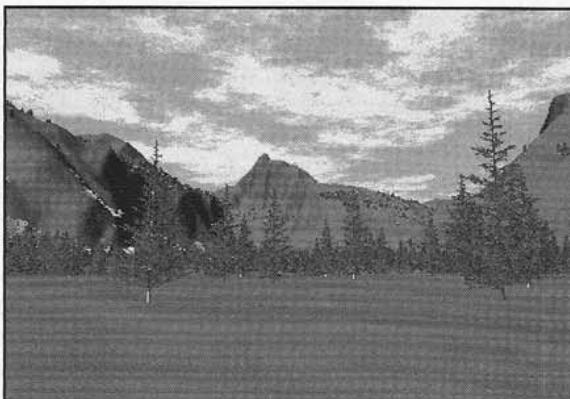
able effort may be necessary to achieve the best palette arrangement with this method. This is what I meant when I talked about fine tuning earlier.

You also have a choice of either extruding the landscape or carving it. That is to say you can build it up from a flat base or literally carve it out of a mesa. In the carve mode you can specify the mesa height up to 32767 metres. The colour heights can also be scaled to stretch out the heights of the colour numbers.

Overlaying Landscapes

A very useful feature of *ScapeMaker* is the ability to double expose whereby you can add one landscape to another. This was the feature I referred to earlier where I talked about adding the constructions to the existing landscape from a buffer. It is also possible to insert small additions to the existing scape.

An adjustable smoothing capability is provided to smooth the levels between



Scenery Animator will render both oak and redwood trees

contours such as where cliffs or steep walls exist. This control can be applied to either or both the X or Y axis. *ScapeMaker* supports AREXX and through the special JAH command allows you to operate it from AREXX programs or AmigaDos scripts.

Conclusions

All in all a very versatile and useful program. It can be a little frustrating at

first when you don't get the palette colours right and the landscape bumps up where it should go down or vice versa. Wrong settings here can lead to some very slow conversion. Experimentation is the name of the game - the end result can be worth the wait.

The manual is rather sparse and could be a bit more user friendly but then I don't suppose one has the right to expect too much when the whole thing only costs US\$40. The developer, Daniel Wolf, informs me that Version 3.0 is in the pipeline and will be

much improved. With perseverance you will come to grips with this program and enjoy converting known landscapes via *Scenery Animator* or *Vista Pro* into your very own animations or pictures.

Scenery Animator is available through local Amiga resellers. *Scapemaker* might require a direct purchase from the USA - Contact Megage-M - dial 0011 1 805 349 1104. □

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Dpaint Tutorial

The Right Moves

by Graham Bowden

Before we begin an apology is in order. I rushed in where angels fear to tread and vilified the good designers of *Deluxe Paint 4* with regard to one of the colour range problems mentioned way back in the May issue of ACAR.

In that issue I said that to swap between colour ranges required the user to step into the Range Requester or the Fill Type Requester. This is not so.

One can step backward or forward through created colour ranges using keyboard Alt-] or Alt-[respectively. What is more Alt-r will reverse the direction of the colour range one is currently using. Someone out there in reader land may have already picked me up on this point and written to the Editor by now but if no one has then learn this lesson ... RTBMM. What's it mean? Read The Bl...y Manual Mate. Good advice for any powerful or even not so powerful program.

Working in 512K

But enough of that. There seem to be an inordinate number of aspiring animators out there who don't understand the intricacies of *Deluxe Paint's* Move requester. A great number of sub-meg Amiga owners also, who are unaware of the uses to which this requester can be put even without the memory to actually animate. That last may be incorrect. Are there any Amiga owners with less than one meg these days?

Very few I'll wager. Nevertheless I was still a mere 512K Amiga owner when *Dpaint 3* first burst on the scene so for the sake of any who continue to labour under this monstrous handicap

we'll look at a few ways to brighten your *Dpaint* experience.

To begin with, to use the Move requester first we need to be able to call it up. Vanilla Version Ami owners may believe this to be an impossible task given that the menu item is ghosted due to a lack of memory. Well, VVA owners, it's not impossible. The answer lies in the keyboard commands I'm always trying to impress upon you users. A quick look at page 277 of your manual will reveal uppercase M as the keyboard shortcut. So the good news is that <Shift>-M calls up the Move requester from the keyboard even with minimal memory. And the bad news?

There'll be no animation frames to play with in this case and the requester will be somewhat truncated as a result. There will still be the complete fill requester as shown in the upper part of Figure 1 but the central area will be without the "Record" and "Trails" buttons. Never mind, what remains of the requester is eminently usable. Even with a meg or more of memory this cropped requester can be used if the Move requester is called

up prior to creating any animation frames. This in turn will allow the effects discussed in this tutorial to be created.

Understanding the Move Requestor

Before we enter into a discussion on those effects however let's first see what the various boxes and buttons will do for us.

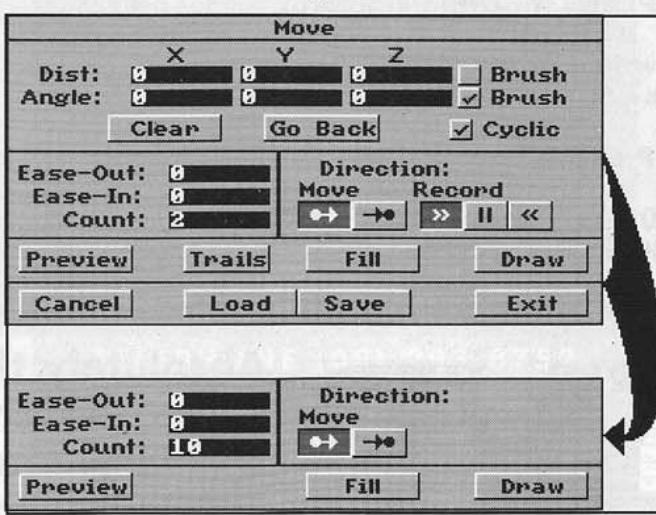
I reckon the distance and angle boxes are pretty well self explanatory with a little experimentation proving to be user enlightening. Just remember the numbers, which represent distance in pixels travelled, can be positive or negative in these boxes. An apparent anomaly in the direction of Z axis travel will be discussed later. Activating the Brush buttons will cause the brush to move and rotate along its own axes rather than the screen's axes. A practical example will be discussed later.

The Clear button also requires no explanation but the Go Back has proved to be the cause of much consternation for some. Simply put, it places the current brush back in the position it occupied before it was moved. *Dpaint 4* always begins moving a brush from the last position that it was stamped down on the screen. After the Draw button has been used, *Dpaint* remembers both the finishing position and starting position of the brush.

This means that provided you, the artist, don't re-stamp the brush between animation actions, the next time the Move requester is used the brush will carry on from where it left off. If you need to call for the brush to subsequently move from the original screen position just press Go Back. Got that? Write to me if you haven't because right now we're moving on.

We'll pass over Cyclic, Ease Out and Ease In for the moment. More on them ... later. Count is simply the number of times the brush will be stamped down as it moves and can be as many as memory will allow. The Move buttons determine

Figure 1



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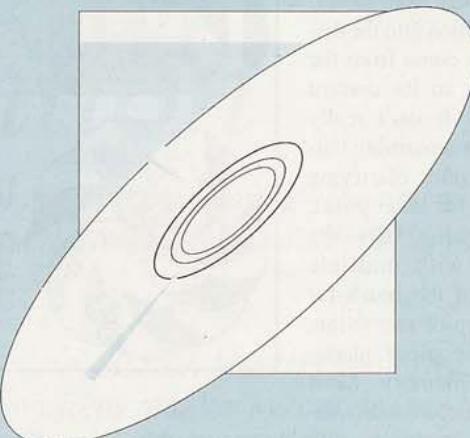
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whether the brush will move away from its current position into the distance or come from the distance to its current position. I don't really think the remaining buttons require clarifying except for one point. Fill, which fills the screen with multiple copies of the brush for each step of animation, requires copious quantities of memory. Most users therefore will probably be unable to fully appreciate this effect.

Getting Started

Moving right along now let's make a start on the pictures. First to Figure 2. This shows the different ways a brush can move depending on the selection of the Brush buttons. With the Dist: Brush button unchecked -default setting- the brush will move along the screen's X, Y and Z axes. Naturally these axes are not affected by the rotation of the brush so it (the brush) will move in substantially straight lines. The settings for the upper illustration in Fig. 2 were Dist: X=300, Y=0, Z=0 and Brush button unselected.

Angle: X=0, Y=0, Z=360 and Brush button selected. The result was a brush which rotated 3600+ as it moved along the screen's rock solid X axis.

The lower illustration had exactly the same Dist: and Angle: settings but the Dist: Brush button was selected. Now as the brush moved it travelled along its

own X axis which was changing direction with each step. The arrow indicates the changing aspect of this axis as the brush rotates. Close scrutiny will prove that each arrow points directly at the centre of the following brush. Needless to say, if the angle of X or Y had been changing as well we would have seen the brush dart off in a couple of other directions as it dutifully followed its axis.

Examples

Figure 3A gives another practical example of brush movement along screen or brush axes. I've included the settings in the drawings including the Count: (number of times the brush is stamped down) and the Move button settings in an attempt to make this explanation a little shorter. In Fig. 3A I stamped the brush down as it's seen on top of the pile. I then set up my distances and angles, left the Count: at the default 10 and selected the right hand Move button. The sequence on the left of 3A shows the

brush moving from the distance to the spot where I'd stamped it down along the screen's axis.

The sequence on the right is naturally moving along the shifting brush axis. In each case the final stamp of the brush was in the position I'd originally stamped it down. If the left Move button had been activated the brush would have

started from where I'd stamped it and moved down the screen growing larger and larger and would most likely have ended up off screen. Experiment for yourself to learn the effects.

Figure 3B is an example of rotating a brush with cyclic turned on and off. DPaint always rotates its brushes about the handle. So if the handle is centred (Alt-s) the brush will spin about its centre. In the case of 3B however I used Alt-z and positioned the handle just outside the left end of the brush so that it would swing around this point for greater effect. The brush on the left was rotated through 3600 degrees in six steps with Cyclic ON while that on the left was similarly moved but with Cyclic OFF. Only the brush on the left appears to actually have been stamped down the full six times.

Ah, but all is not as it seems for the brush with Cyclic turned off. You see Cyclic is present to ensure that objects which are to be rotated in a repetitive or cyclical motion will do so quite smoothly. To understand look again at the picture

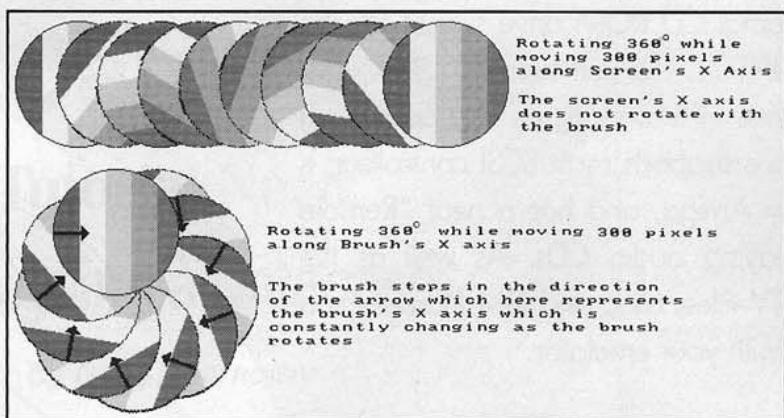


Figure 2

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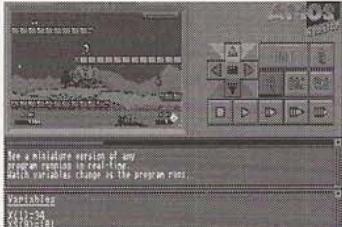
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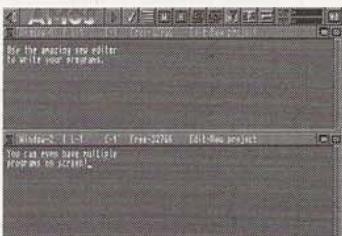
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 **Pactronics**

on the left of 3B. Each frame is numbered and shows six even steps of animation. Because Cyclic was turned ON, frame 6 and frame 2 are neatly dissected by frame 1.

DPaint has ensured that frame six has rotated 3000 degrees with respect to frame one giving six evenly spaced brushes 600 degrees apart. The picture on the right however has rotated the brush through a full 3600 degrees in six moves. This puts each brush 720+ apart with frame one and frame six being identical. If one were to create six frames of animation and use these two examples as a demo the audience would see the brush on the left rotating smoothly while the brush on the right would hesitate as it passed the identical 6th and 1st frames.

So the moral of the paragraph is ... If an object is to rotate smoothly in any plane, switch Cyclic on. However before

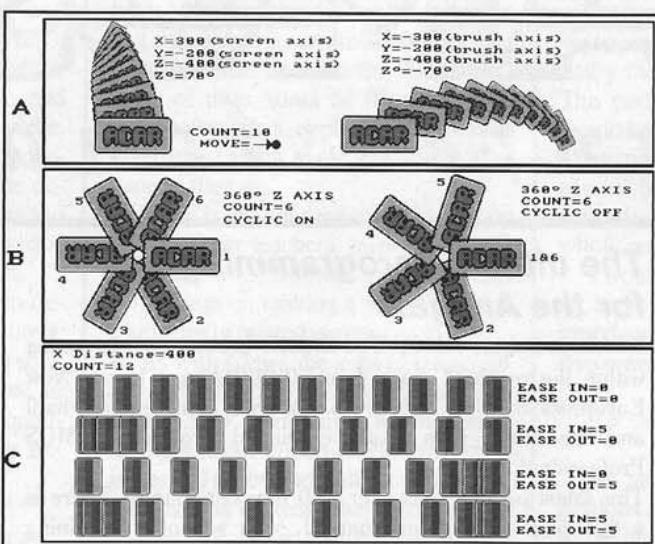


Figure 3

you go off and experiment with cyclicals, finish reading the article please. In fact finish the entire magazine.

Easing On

Good, you're still with me. Onward

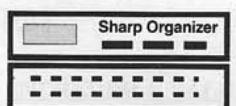
and upward now to Ease In: and Ease Out:. It's my personal and bigoted opinion that these two boxes could be more easily understood if they were labelled Accelerate: and Decelerate: respectively. That is, after all, what they do to the animated object. Check out 3C and you'll understand. The top row has the brush moving at a constant speed from frame one. The second row shows the brush accelerating up to speed while row three shows it starting off instantly and decelerating at the end of its travel. Row four of course has taken a little each way.

Ease In: is useful when animating a falling object because such objects begin falling slowly and gradually accelerate. A pendulum would use both Ease In: and Ease Out: as it reached each end of its swing. I'll say it again here, use your artistic talents and experiment, who

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knows what you'll come up with.

Figure 4, if there's enough room left in the magazine to print it, is a quick demo of moves which can be made by those with insufficient memory to really animate. I've used the same brush in each case but changed the Dist: and Angle: settings and also moved the handle around a bit. Each box in Figure 4 has a small cross somewhere within it which represents the position of the screen's perspective centre for each effect. I've done this to explain that apparent anomaly in the direction a brush takes when moving along the Z axis.

Using the Z Axis

Remember the Z axis is the one a brush moves along when travelling into or out of the screen with positive numbers going away and negative numbers coming nearer. However, the Z axis is only perpendicular to the screen when

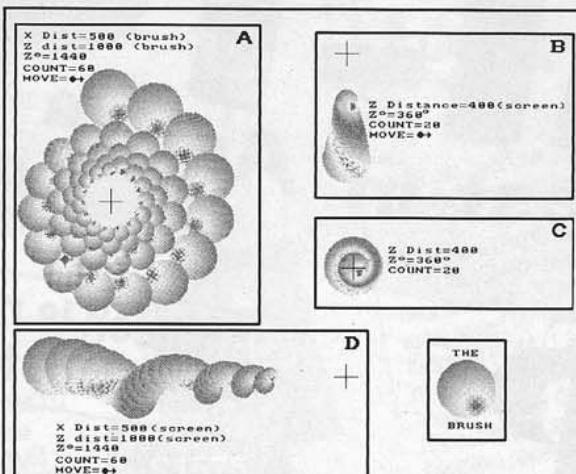


Figure 4

the perspective centre is directly beneath the handle of the brush. Compare 4B with 4C. In each case the brush simply rotated 360° as it travelled along the Z axis but 4B had the axis above the brush handle while 4C had it directly under the handle.

How do you know where perspective centre is? Press the numerics keypad En-

ter key. The small crosshairs on the screen represent perspective centre. More on this in a future article covering perspective.

Okay, the spiral in 4A was created by placing the brush handle well below the brush but directly over perspective centre. It was then moved and rotated along its own axes giving the result you see.

Figure 4D had the brush handle just a little off centre so that as it moved and rotated along the screen's axes it would form that corkscrew effect. Just one other thing regarding Z distance movement. The smaller an object be-

comes as it moves away the shorter the distance it steps between frames and the closer (read larger) it gets the larger the steps are that it takes. X and Y steps also become smaller or larger in sympathy with this effect being evident in the distances the brushes moved in Fig. 4.

So once more with feeling ... experiment. □

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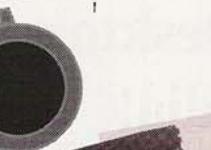
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New Accelerator from CSA

A budget priced '030 card able to carry up to 32 megs of RAM. This unit is selling from \$750.00 complete, and now most users should be able to afford the power of the 32 bit bus. Call for more details.

ICD is very proud to release a brand new version of controller, this controller has it all! IDE, SCSI SCSI II room for RAM and blistering fast transfer rates, there is a unit for the A500 that has an expansion slot for GVP type cards and many other extra like the ability to run 2 IDE drives, ect.

DMI has released a top end video card called Vivid 24. This card carries up to two risk coprocessors 16 megs of video RAM, 16 megs of 32bit RAM and operates at the rate of around 160 MFLPOS. This card is for pro users indeed and at 1/4 the cost of MAC or IBM cards should turn the market on its end.

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Education

Fun with Animation, Desktop Video and Multimedia!

by Stan Nirenberg

No, this is not going to be an 'everything you wanted to know about animation but were afraid to ask' article. As you may have noticed by now, I am a strong proponent of computer art generally and *Deluxe Paint* specifically.

My background is very much technical rather than artistic, yet in recent years I have discovered the fun and sense of achievement that one can have with computer art. It is a great medium to express one's creativity, especially when applied to animation and desktop video.

The Animation Network, tel (03) 389 6188, fax (03) 389 6116, has just released two Klip Kits for computer animation, desktop video and multimedia. The two titles are called *Glowi* and *Green Ship Earth*, and they retail for a mere \$45 each or \$90 for a school site licence. They are also available for IBM compatible computers for \$69.95.

The Animation Network

The Animation Network was started a few years ago by Andrew Nelson and Lisa Roberts in an effort to represent and promote the work of electronic artists and animators.

It also acts as an agency for computer artists for work in education, industry and the arts through an independent directory and organises workshops and demonstrations in computer animation and graphics.

Its main product for some time has been the excellent annual compilation video entitled *The Animation Year Book*. This year, the Animation Network has come out with two new educational resources aimed at both the home user and schools.

Membership of The An-

mation Network is available for those who want to make use of this resource. In addition, you can purchase a copy of their video or submit original work for future editions of *The Animation Year Book*.

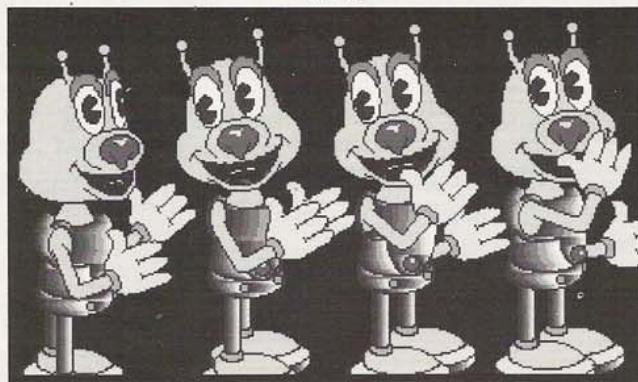
Klip Kits

The Klip Kits are collections of animated and still clip art that can be used to put together sequences of animations to tell a story. To use the kit requires that you own *Deluxe Paint IV*. If you don't have a copy yet, this is one of the best excuses I can think of to buy it.

The software comes on two disks each and is accompanied by an attractive three ring binder containing full instructions. To make life as easy as possible, the manual is simple and unintimidating. Instructions are provided on how to back up the disks, how to use the clip art and a short tutorial is included to get you started. The software may be loaded onto a hard disk if desired, which makes accessing the animbrushes and animations so much easier and quicker.

Each book contains ten activities that take you through the process of creating the finished product. This is one of the strengths of these packages and makes them ideal for both school and home use.

Glowi



For the home application, the manual takes the user step by step through what is required to create the finished animation, suggesting ideas and giving hints. Although the projects or activities ask the user to take the time to create his or her own drawings from scratch, the disks come with lots of animations and even finished sequences to let the user see a finished product quickly.

These packages are also ideal for schools, because they contain activities that can be applied to the classroom and to project work immediately. In addition, they contain classroom specific activities, ideas and a list of resources that make it much easier for teachers to understand the concepts and bring them to the classroom with a minimum of effort.

Each package is liberally illustrated and includes a full catalogue of the art on disk for reference. Pages have been organised so that they can be photocopied and used by students in a classroom to experiment with ideas. The pages in the manuals are looseleaf and A4 size, which make them ideal for this purpose.

Note that each package has been thoroughly researched and carefully developed and tested by an extensive team of individuals and schools.

Glowi

Glowi is an Electronic Puppet Construction Set whose main purpose is to teach 'beginners of all ages' the art of computer animation. There is no need to draw any of the art, as it is provided on disk. However, there is no doubt that once started, this package will inspire you to try some of your own backgrounds, props and characters.

The activities in this package include an introduction to using *DPaint*, simple examples of animations such as walking and swinging arms, building backgrounds and creating complete animations. All exercises are performed with the cute *Glowi* character who fills about two thirds of the screen when complete.

In addition, some subtleties and techniques of animation are discussed, the sort of subtleties that give realism in professional work. These include understanding and representing natu-

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ral movement and the stretching and squashing effects experienced with a bouncing ball. In addition, there is an activity that introduces animation and speech, ie, synchronising lips with voice. Finally, the user is introduced to storyboarding in order to understand the design process associated with animation and to put some order into the chaos associated with unplanned activities.

The aims of this package are to develop skills in visual communications, provide a focus for using animation software, to teach animation techniques, to foster an awareness of movement qualities and most importantly to foster imagination and originality.

Green Ship Earth

Green Ship Earth is described as a dynamic way of investigating the planet. Although it is also designed to help students and others to create animations for the computer or video, it concentrates less on the techniques of animation and more on environmentally related issues. Of the ten activities provided in the work-

book, the first three are about rhythm and movement in nature and in art. The other activities include the "breathing" cycle of trees, ideas on illustrating the greenhouse effect, depletion of the ozone layer, the carbon cycle and some other general themes.

There is the standard catalogue of clip art, notes for teachers, information and sources for additional assistance and some ideas on making a video on environmentally related issues.

As with *Glowi*, the aims of the activities are related to art. But in addition, *Green Ship Earth* aims to encourage thinking about important environmental issues and to develop skills in visual communications in areas other than art. This package provides a rich resource for teachers and students, and is a great way to bring together art, computers and science education.

Conclusion

Glowi and *Space Ship Earth* are excellent packages for use at home and in the classroom. They teach many aspects

of computer art and animation, desktop video, multimedia presentation and generally the art of visual communication. The packages are rich resources and would keep anyone busy for many hours. They provide a structured instruction course, but for the more interested and enthusiastic they are a springboard for a whole range of new activities.

I would recommend both packages to all, and I would certainly like to see them introduced in schools, perhaps from year five onwards.

Feedback!

As usual, your comments and suggestions are most welcome. Please write to me c/o ACAR or directly to PO Box 136, Forest Hill Vic, 3131.

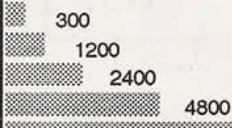
We have had quite a lot of material sent to us for review but we haven't had the space to include it in this month's column. Next month we will bring you further reviews of interesting educational software.

Until then, good studying and good luck with exams as they draw near! □

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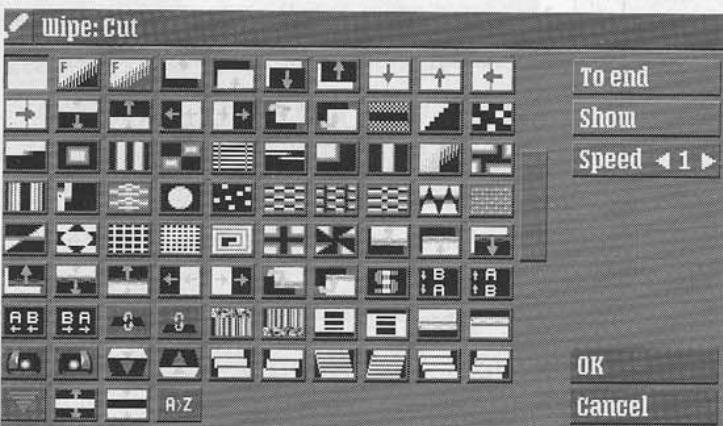
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You Can CanDo

Tutorial No. 8

Designing a Database

by Greg Abernethy

A database program allows you to access data very quickly - a list of names and addresses, or a catalogue of parts.

A database is also the name given to the file in which the data is stored in an specially organised way. Using a database saves time. You won't need a filing cabinet and if you exchange your information with others electronically, it also saves paper.

Following is a step by step guide to

creating a simple database deck using CanDo 1.5 or better. If you find it a bit heavy going, check over some of the earlier CanDo columns, or refer back to your user manual.

Step by Step in CanDo

The Database window will be a medium-resolution window with four colours, that has four fields, six buttons and a document.

WINDOW DETAILS
WINDOW NAME "Database..."
WINDOW DIMENSIONS X - 0 Y - 0
Width - 640
Height - 256
4 Colours
WINDOW OBJECTS NONE
WINDOW COLOURS Background 0
Border 1 Text 0
WINDOW OPTIONS The window has visible borders Try to open the window on the current screen

CARD DETAILS
CARD NAME "Entry"

AFTERATTACHMENT SCRIPT
If Exists(TheCurrentDirectory)
"DB.dat")
Let Database = LoadVariable(The CurrentDirectory||"DB.dat")
EndIf

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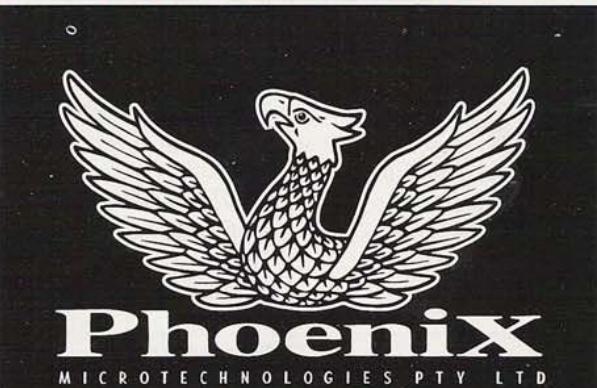
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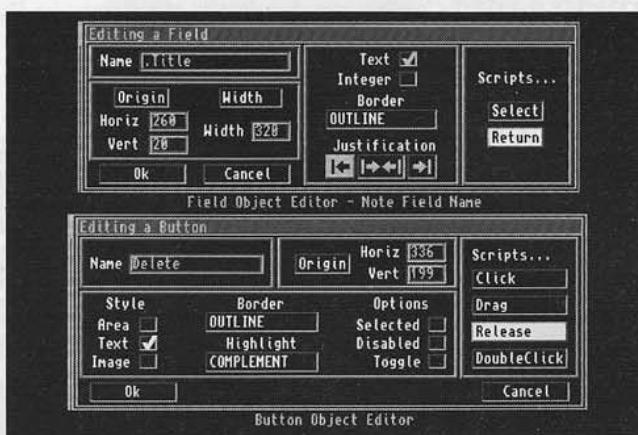
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Let Index = 1

SetPen 1

PrintText "Record Title",82,20

PrintText "Artist",82,40

PrintText "Record Company",82,60

PrintText "Serial Number",82,80

PrintText CenterString("Additional Information",78),0,92

Do "Display"

Explanation

A blank record will be displayed.

Routines

There is one routine, the "Display" routine, which displays the current record, set by the Index variable, in the Database fields and document on the page.

Make the routine a LOCAL routine and name the Routine "Display".

"Display" Routine Script

SetDBObjects Database[Index]

WorkWithDocument "Info"

MoveCursorTo STARTOF DOCUMENT

SetWindowTitle "Database Entry:"|||Index

SetObjectState ".Title",ON

Explanation

CanDo allows you to set up your Database objects (fields or documents) so that information can be taken directly from these objects using GetDBObjects;

GetDBObjects Database Variable Name, RecordNumber

e.g. GetDBObjects Database, Index

Similarly, to display the information contained in a Database, CanDo has the command SetDBObjects. The format for this command is;

SetDBObjects Database Variable Name, [RecordNumber]

This command sets the fields and the Information Document to the contents of current record, and sets the WindowTitle to the current Record number. Lastly, the cursor is displayed in the ".Title" field.

BUTTONS

The Database Entry page has six buttons. Their details are;

1) BUTTON NAME - "Previous"

ORIGIN Horizontal - 44 Vertical - 119

TEXT - " Previous "

BORDER - OUTLINE

HIGHLIGHT - COMPLEMENT

"Release" Script

Let Database[Index] = GetDBObjects

Let Index = Index - 1

If Index = 0

 Let Index = LastArrayIndex(Database)

EndIf

Do "Display"

Explanation

Always start from record one when setting up a database, as I found problems if record zero was accidentally used. This caused endless problems until I decided to always number my records beginning from Number 1.

2) BUTTON NAME - "Next"

ORIGIN Horizontal - 154 Vertical - 199

TEXT - " Next "

BORDER - OUTLINE

HIGHLIGHT - COMPLEMENT

"Release" Script

Let Database[Index] = GetDBObjects

Let Index = Index + 1

If Index > LastArrayIndex(Database)

 Let Index = 1

EndIf

Do "Display"

Explanation

This script is used to display the NEXT record to the one currently being displayed. If the current record is the last record in the Database Index is set to one, and the appropriate Record is displayed.

3) BUTTON NAME - "Add"

ORIGIN Horizontal - 245 Vertical - 199

TEXT - " Add "

BORDER - OUTLINE
 HIGHLIGHT - COMPLEMENT
 "Release" Script
 Let Database[Index] = GetDBObjects
 Let Index = Index + 1
 InsertArrayEntry Database,Index
 Do "Display"

Explanation

When the user wants to ADD a new entry, a location must be created in the database for the new record. InsertArrayEntry will insert a new record into the database. The new record is displayed showing blank fields.

4) BUTTON NAME - "Delete"
 ORIGIN Horizontal - 336 Vertical - 199
 TEXT - " Delete "
 BORDER - OUTLINE
 HIGHLIGHT - COMPLEMENT
 "Release" Script
 DeleteArrayEntry Database,Index
 Do "Display"

Explanation

When the user wants to DELETE the currently displayed record, use the DeleteArrayEntry command to remove the current record from the database.

5) BUTTON NAME - "Save"
 ORIGIN Horizontal - 245 Vertical - 199
 TEXT - " Save "
 BORDER - OUTLINE
 HIGHLIGHT - COMPLEMENT
 "Release" Script
 Let Database[Index] = GetDBObjects
 SaveVariable Database,TheCurrentDirectory||"DB.dat"

Explanation

When the user wants to SAVE the database, you need to get the current record first, in case it has been changed. Then, save the database as a file called "DB.dat" in the Current Directory.

6) BUTTON NAME - "Quit"
 ORIGIN Horizontal - 534 Vertical - 199
 TEXT - " Quit "
 BORDER - OUTLINE
 HIGHLIGHT - COMPLEMENT
 "Release" Script
 Let Database[Index] = GetDBObjects
 SaveVariable Database,TheCurrentDirectory||"DB.dat"
 Quit

Explanation

When the user selects "Quit" I decided it would be a good idea to automatically SAVE the database, as some users may click on "Quit", forgetting to save their work. (I'm notorious for doing it!)

FIELDS

When the user presses return the cursor jumps to the next field. When the user presses return in the last field, the cursor will be highlighted in the document.

1) FIELD NAME - ".Title" ; Field for Record or CD Title
 ORIGIN Horizontal - 260 Vertical - 20

BORDER - OUTLINE

WIDTH - 320

JUSTIFICATION - Left

"Return" Script

SetObjectState ".Artist",ON

2) FIELD NAME - ".Artist" ; Field for the Artist's Name
 ORIGIN Horizontal - 260 Vertical - 40

BORDER - OUTLINE

WIDTH - 320

JUSTIFICATION - Left

"Return" Script

SetObjectState ".Company",ON

3) FIELD NAME - ".Company" ; Field for the Record Company's Name
 ORIGIN Horizontal - 260 Vertical - 60

BORDER - OUTLINE

WIDTH - 320

JUSTIFICATION - Left

"Return" Script

SetObjectState ".Serial",ON

4) FIELD NAME - ".Serial" ; Field for the record or CD serial number
 ORIGIN Horizontal - 260 Vertical - 60

BORDER - OUTLINE

WIDTH - 320

JUSTIFICATION - Left

"Return" Script

SetObjectState ".Information",ON ; Highlight cursor in document

DOCUMENT

A document is useful for entering or displaying large amounts of text, of the tracks on the album.

4) DOCUMENT OBJECT NAME - ".Information"

DOCUMENT NAME - "Info"

ORIGIN Horizontal - 6 Vertical - 103

BORDER - OUTLINE

WIDTH - 62 HEIGHT - 90

Document Type - MEMO - vertical slider bar

Next Month

I will add some SEARCH and SORT routines, a PRINT routine and an option for loading and saving databases from other locations next month. □

AMOS Column

by Wayne Johnson

Before I start the column this month, I'd like to point out that information in this column may be subject to change and cannot always be 100% accurate. Faxes and information that I receive are always release notes and rumours directly from the companies involved with AMOS and associated extensions. Neither I, nor the companies that are mentioned, will be held responsible for incorrect, changed or invalid information.

AMOS Professional

So back to it! By now AMOS Professional should be starting to hit the shelves. That's the news at the moment, anyway. The release date for England was the middle of October. Here's a quick run down of AP's features.

There are 200 new commands bringing the command set to 700 without other extensions like 3D or Tome loaded. For animation freaks, your dreams have finally come true. AMOS Pro CAN play IFF animations FASTER THAN DPAINT! Many people have written and called since AMOS' first

release trying to use IFF animations in AMOS.

The only alternative in the past was to either create large BOB's and set up an animation channel, page flipping with several screens, or to call DOS to use an external animation player. Very messy and cumbersome, now with AMOS Pro it's a lot simpler.

AREXX support to talk to other tasks and to use scripts to control things in AMOS has been added. Also, ELSE IF clauses along with Double-Precision floating point math! New Hypertext commands allow you to create customised dialogue boxes and file selectors.

There's a MED music library with support with MIDI data send. This is a must for people who once tried making MIDI programs with the serial extension. Noise, Sound and Protracker support has been added.

There's easier access to the printer, serial AND parallel ports too. All programs written in AMOS and EASY AMOS can be loaded into AMOS Professional. New MOUTH commands link sprites to speech output from the SAY command to create say, a realis-

tic talking character. There is a brand new Editor with drop-down menus, keyboard macros, advanced undo/redo and multiple windows on screen.

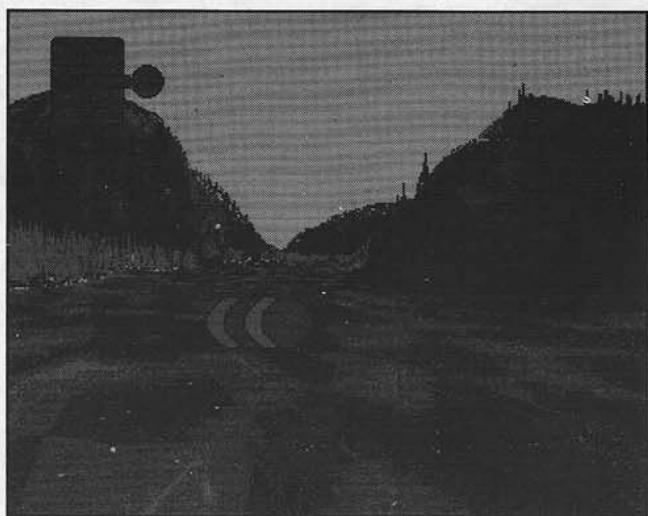
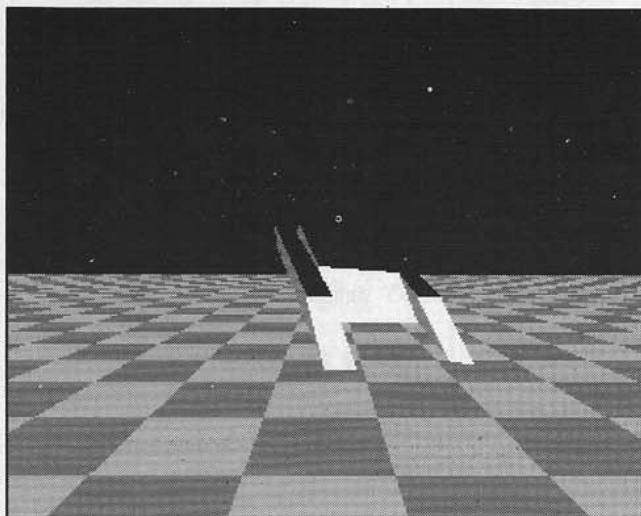
The most unique feature of the editor is an on-line help which provides details about a command's usage at the cursor position - and another click takes you through a thoroughly documented working example featuring that command!

There's a completely new manual that is written by both the author of the EASY AMOS manual and the author of the AMOS manual. There are new sections in the manual explaining how to get the most from the commands and how to combine them to create any result seen in any Amiga program.

The current set of AMOS accessories such as the Sprite Editor, AMAL Editor and all the rest have been replaced by a completely new set of accessories. There is a new object editor that allows you to create BOB's Sprites and icons with built in animation facilities. There is a sample bank maker and a resource bank editor.

Two of the upgrade disks have been crammed full with working examples, and tutorials which demonstrate AMAL, the new AMOS Interface System, many examples of collision detection and heaps of other popular topics.

Included in the disk set are highly polished programs including *Planet*



Zyberx (a scrolling shoot 'em up), File O'fax (electronic data organiser), Quattro (puzzle game featuring a clever artificial intelligence routine) and Dithell's Wonderland, an eight way scrolling platform game that is on par with many commercial games.

The total kit comprises a manual and six disks. If all that doesn't whet your appetite for programming then I don't know what will. Full support is available from the club.

Only one gripe is the fact you still cannot fully interact with workbench and intuition. However, Europress assure me that calling libraries has been made a lot easier.

News & Info

Mini Office II, one of the most popular business packages for the C64 of all time, has now been re-written for the Amiga and is called *Mini Office*. There are five modules; Word Processor, Spreadsheet, Database, Graphics, and Disk Utilities and these are all written in dear old compiled AMOS code. They are all well written and very professional. They're a good example of AMOS' capabilities.

Problems

Continuing from last month's bunch, it seems that every month a common set of problems occur. If you are having any of the following hassles, then read on.

• I have only just bought AMOS and the "key is above the 2 key and the 'key displays only A #. The \$ above the 4 key only gives me a pound sign.

This has been the most frequent complaint I have received over the last few weeks. The reason this happens is that AMOS comes to Australia with the original UK keymaps installed. To correct this:

- 1) Load up the config.AMOS program.
- 2) Select Load Default config.
- 3) Select Keyboards
- 4) A requester will appear. Go into the keyboards directory on the AMOS

Program disk and select AMERICAN.

5) Follow the on screen prompts.

- When I try to use "print" or "text" to put text on the screen, I always get a block of colour sitting behind the characters.

This is due to the setup of your writing mode. Change the settings of the modes by using:

GR WRITING [number] for the TEXT command & WRITING [number],[number] for the PRINT command.

- My compiler says, "PROGRAM NOT TESTED" whenever I compile a program I have written.

Reload your program into AMOS, click on TEST, then resave. Load the compiler and try again.

3D Programming

Those lucky enough to possess the 3D extension will know the joys of creating worlds filled with twisting, turning objects. The truth is that there are many that don't seem to be able to get into it.

The main part of AMOS 3D programs is the REDRAW LOOP. Unfortunately, 3D cannot be played under interrupt using AMAL like BOB's Sprites and screens, so we have to update the redrawing process ourselves. The most common redraw loop you will see is:

```
Double Buffer  
Autoback 0  
Do  
Rem USE 3D COMMANDS HERE!!  
Wait Vbl  
Td Cls  
Td Redraw  
Screen Swap  
Loop
```

The routine switches on the Double buffer to give us physical & logical screens. Autoback 0 stops the double buffer from switching back and forth automatically. Once we enter the loop, any 3D commands such as Td Angle, Td Move, etc are used to alter our 3D object. No graphics are displayed after issuing 3D commands, on either logical or physical screens, however, they

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have been altered. Next comes the Wait Vbl which just waits for the next VBL in case the Amiga is still drawing from the last loop.

From here we issue a Td Cls which clears our screen of 3D objects, after which, we use Td Redraw which redraws our 3D objects on the logical screen. Our new frame is brought into view with Screen Swap. This process continues, constantly displaying new frames and creating 3D animation on screen at a fairly good speed (depending on object complexity).

If you experience flickering in your 3D routines it's caused by one of three things:

1. You are not using Screen swap or double buffering.
2. The commands in your redraw routine are out of order.
3. You are incorporating a Td Background in the wrong position in your redraw routine.

Problems with 3D

Despite redraw sequence problems, you may find that your objects leave a trail of colour when rotated or appear and disappear when Td MOVED. If your objects leave broken colour behind as they rotate, it is because you are using a screen with more than 16 colours. The second problem of object constantly disappearing and reappearing as they move is because of you have left out null values from your Td Move command. Take the following:

Td Move Rel 2,,100,

This command moves object 2, no units across, 100 units down, and no units in. For some reason, this confuses the AMOS system into whether or not the object should be shown or hidden. The correct syntax is:

Td Move Rel 2,0,100,0

Beginners Corner

We are going to use our joystick routine to move a BOB around on a background designed in *Dpaint*. First of all, you must have a disk handy or some directory with an IFF picture in it that you like and you must know

whereabouts it is. Our routine is below:

```
Cls 0 : Rem Clear the screen
Circle 10,10,10 : Rem Draw a circle
Paint 5,5 : Rem Fill the Circle
Get Bob 1,0,0 To 21,21
Rem
This circle will be our BOB
imageX=160 : Y=100 : Rem put start co-ord of our BOB is X and Y
Screen Close 0 : Get rid of the screen
Load Iff
"YOUR_DISK:YOUR_DIRECTORY/YOURPICTURE.IFF",0
Rem This loads a picture from where have stored it
Rem And places it into screen 0
Bob 0,X,Y,1 : Put the BOB in the centre of screen
Do
If Jup(1)=-1 Then Add Y,-2
If Jdown(1)=-1 Then Add Y,2
If JLeft(1)=-1 Then Add X,-2
If JRight(1)=-1 Then Add X,2
Bob 0,X,Y,1
Loop
```

The loop that is above just does a check on either of the four directions. When a position is held on the joystick, the value of either Jup(1), Jdown(1), Jleft(1) or Jright(1) equals -1. If any of those positions are indicated by -1, the co-ordinates are changed, and the BOB is moved.

Last Words

The AMOS club is getting bigger and bigger with more members joining daily. If you haven't ever bothered to join, and own AMOS, give me a call on the AMOS Infoline after 1.30pm (02) 748-4700 daily, and we'll have a talk about the benefits of joining. Remember, it's free to join. Next month, there will be an AMAL tutorial that will start from scratch and explain how it all works, plus more news and information. □

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by Andrew Leniart

Feedback on the couple of issues I devoted to the topic of running your own BBS has been flooding in via letters to my PO Box as well as messages left by callers to my own board. I'd like to take this opportunity to express my thanks to all those that wrote in, but in the same breath, sorry to those that asked for personal replies to their letters.

Though I do make exceptions where possible, I can't very often enter into personal correspondence. However, I will try to cover the majority of queries and comments made via future editions of Andy's Attic so keep watching this space. The rest of this issue, will be devoted to answering some of the other mail that's been coming in of late.

Tandy 200 Printers

First one comes from John Madsen of Rockhampton in Qld: Dear Andy, I'm writing in answer to your appeal for information in the July issue of ACAR. Mr B Taylor of Ayr in Qld requested information about drivers for Tandy 200 printers. I am presently using a Tandy 442 printer and according to the manuals supplied, Tandy 200 and 400 series require the same drivers. If a Tandy driver is unavailable, IBM Proprinter drivers will do the same job. I obtained my drivers from

Megadisk (Fish Disk 451) and Utilities disk UT-331 (from their free catalogue disk). I have also found that the old EpsonX and JX drivers on the 1.3 Workbench preferences are good for graphics as well as print.

AA: I'm certain he will be most grateful for the information you sent in, John, so thanks for writing in.

Two in the One?

Peter Gleeson of Dee Why in NSW writes in with this problem: Dear Andy, I run an Amiga 500 with an A590 20mb hard drive and have just purchased the Action Replay MkIII by Datel. My problem is that they both use the external expansion slot on the side of the Amy. Is there any way around this problem or do I have to remove the hard drive every time I want to use the Action cartridge? This is a really tedious process to have to keep performing. Can you help?

AA: Unfortunately Peter, there is not a great deal that you can do about it. As the A590 or the MkIII does not have a pass through expansion slot, your only option is indeed to unplug the hard drive each time you wish to plug in the MkIII and vice versa.

By talking to a technician with a fair amount of knowledge in Amiga hardware hacking, it would probably

be possible to rig up a set up which would allow both units to be connected at the same time, however such a hack would undoubtedly be both expensive to perform and require severe modification of the A500's expansion slot, which in turn could possibly cause other problems. For my money, I'd just learn to live with it.

Put it in Ram

Matthew Beetson of Bega in NSW writes: Dear Andy, I have a few games along with other programs which I like to use by copying them into the Ram: disk before running. However some of them refuse to load from Ram: and insist on using the disk drive. I start by putting all the files in Ram: and then type in a Cli.

CD RAM:

Assign "MyDisk" Ram:

I know the quote marks are not necessary, but I put them in anyway. Despite this, the programs or games still try to load from DF0:. Could it be that something in the game or program tells the computer to load from DF0:? If so, is there any way that I could bluff the Amiga into thinking that the Ram: disk is DF0:?

Finally, is there a way of enlarging the recoverable ram: drive (RAD:)?

AA: Good guess there on the first problem, Matthew. The problem with your software insisting on loading from DF0: is more likely than not because whoever programmed the software restricted its use to a floppy drive via the code which makes up the game, program or whatever.

Assigns will help in some circumstances but certainly not all depending on how the software was written. It may help if you write back with the titles you are having problems with. I may have copies myself and may be able to find a way around one or two.

The answer to your second question is yes. In your DEVS directory on your workbench disk, there will be a file called "Mountlist". You'll need to edit this file to increase the storage space of RAD. Look for an entry like this in the mountlist file ...

This is an example of a mount list entry for using the recoverable ram disk. Depending on the amount of memory you wish to devote to it, you may want to change the HighCyl value.

RAD: Device = ramdrive.device

Unit = 0
Flags = 0
Surfaces = 2
BlocksPerTrack = 11
Reserved = 2
Interleave = 0
LowCyl = 0 ; HighCyl = 21
Buffers = 5
BufMemType = 1

#

To specify Rad's memory capacity, the part of this entry you need to edit is the < HighCyl = 21 > part. Left as it stands above, Rad's capacity would equal to 242K of memory. The formula for working this out is this. Each cylinder has a capacity of 11K. Therefore, (21+1) x 11K = 242K. So if we wanted to give Rad a capacity of say 385K of memory, we would calculate it using the above method and then change the < HighCyl = 21 > to read < HighCyl = 34 >. Ie: (34+1) x 11K = 385K.

Keep in mind that the more memory capacity you give to RAD, the less system memory you will have available to run your programs. Let us know how you went.

Picture Digitising Needed

Dick Ross of Bathurst in NSW writes in with an unusual request: Dear

Andrew, I am writing to you with a problem at hand. A friend and I are in the process of making a fund raising wheelchair tennis demo. Animation, Slide Show etc. Problem is that we are unable to get anyone who is willing or has the equipment to help do the picture digitising. I'm hoping we may be able to locate some willing soul via your column. Looking forward to hearing from you in the near future.

AA: Sure, we can help! Send in your colour prints to the magazine along with a couple of blank disks, and a daytime phone number. We will scan in your photos on a flat bed scanner - the results are better than digitising anyhow. Make sure you tell us whether you want HAM or dithered 16 colour hi-res IFF's. Mark the letter attention to Andrew Farrell. (This offer is not open to everyone - but you're welcome to ring if you're really stuck for a service like this.)

ICD AdRam 540

Bruce Richardson of Wembley in WA writes: Dear Andrew, I'd purchased an ICD AdRam 540 about six months ago with 1 Meg onboard for my Amiga 500. I have read in various overpriced British Amiga magazines that the Workbench 2.0x will not recognize any memory (Chip or Fast) in these types of boards. Is this true or can I go ahead and spend the money to install the other 3 Meg? I don't own WB2.04 but I plan to eventually.

AA: I have never heard of the po-

tential problem which you describe with the ICD AdRam 540 memory expansion device, however never having had the pleasure of playing with one, I decided to contact an expert on the units for some advice on your behalf.

In a telephone conversation with Mr Rob Self from Ami-Tech, Rob advised that he too has yet to hear of such a problem. Indeed, he confirmed that Ami-Tech has sold dozens of these units along with WB2.04 upgrade kits and has never had a single complaint about the Amiga not recognizing the Ram in the unit. On that advice, I would say go for it and buy the extra memory you desire. For more information direct from the horse's mouth so to speak, feel free to call Rob direct at Ami-Tech on (02) 544 1874. Tell him Andy's Attic sent you and I'm certain he'll look after you. A most pleasant fellow indeed.

Next Month

Well, that's about it for another month from Andy's Attic. Join us next month where we will explore many more topics of interest. I'm confident they will be of interest because it's your feedback which determines the topics I cover here so please keep that feedback rolling in.

Next month - more on the topic of running your own BBS and perhaps a review of a new and innovative software shareware package (not yet released) for Ham Radio Buffs. Watch this spot. □

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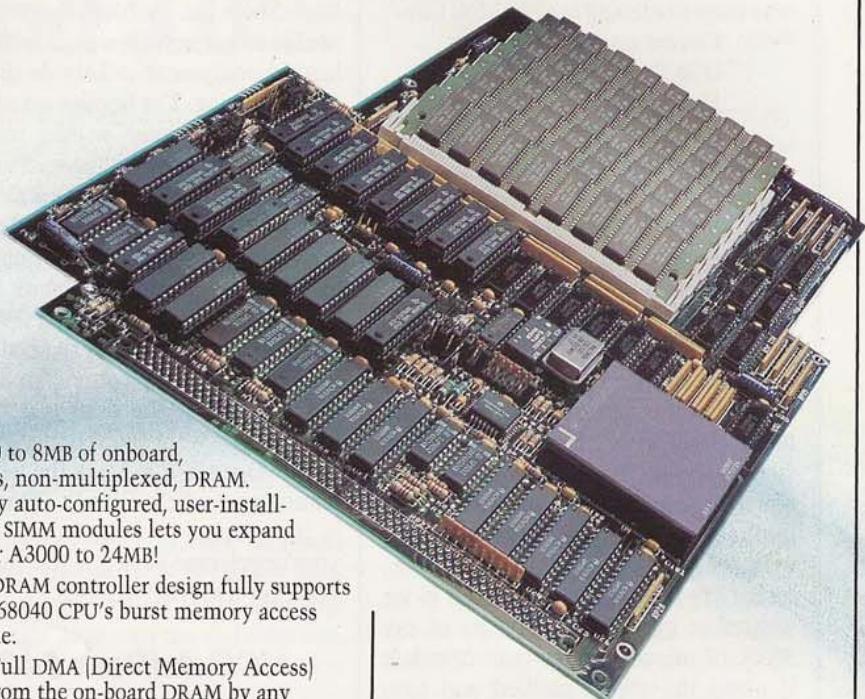
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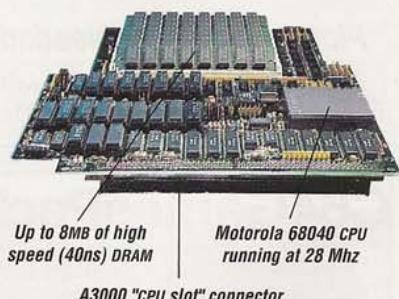
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Hot PD

by Daniel Rutter

Greetings, and welcome to another journey into the world of freely distributable software! Let's get down to the listings:

Scan

This program has but one aim in life - it searches through a load of files in a directory for a given string (series of letters) and prints a chunk out of any it finds, highlighting the search string, and gives the filename.

It's a lot more configurable than that, but that's the gist. This makes it very useful if I want to find all references to MIDI in my textfile directories, which contain all the articles I've written and most of the articles which have ever appeared in all 30 issues of the Megadisc magazine, *Scan* makes life much nicer.

Scan can only be used from CLI, but if you're a serious enough user to need it this shouldn't be a problem. My previous choice in the searching area was *Search*, but *Scan* is about 20% faster and has better options.

Fitting things

One of the simplest things you'll ever need to do with your system is figure out if a certain collection of files will fit onto a floppy or how much room is taken up by a given clump of directories. There are two programs which will help you here - *BCount* and *Fatdir*. *BCount*'s the pretty version, with a nice Intuition interface which allows you to select a path and find the number and size of files and directories in this path.

On the downside, *BCount* doesn't tell you how many disk blocks the files take up, which is important for fitting things onto floppies because a lot

of little files take up more blocks than a single big one of the same size in bytes. It does, however, count hard and soft links, but I've never found to be a very useful feature. You need Workbench 2 to run *BCount*.

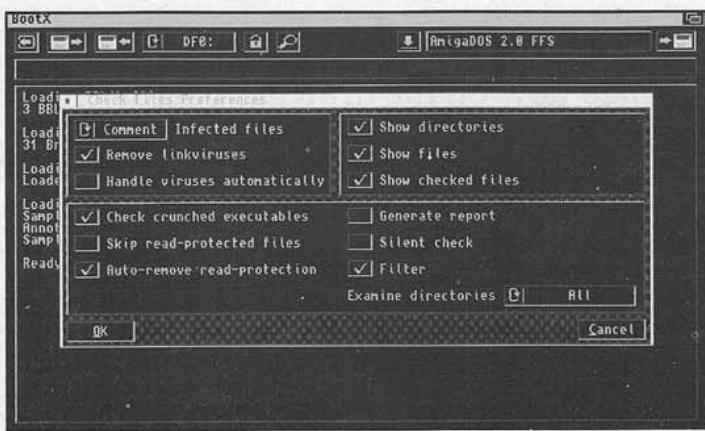
Fatdir DOES tell you how many blocks files and directories take up, does it in OldFileSystem and FastFileSystem blocks (488 or 512 bytes/block), and will even with the -i option individually list directories, so you know how much stuff is in each subdir. The current version of *FatDir* is 1.3 and I use it virtually every time I compile a disk - at a shade over 2k it's easy to fit into anyone's floppy based Workbench.

UnMovie

Quite a few older animations are displayed using the "Movie" program. This is a venerable player which does not use the IFF ANIM 5 format (which is now the standard), and unfortunately dies if you try to run it under WB2. *UnMovie* dissects Movie format animations into individual frames, which can then be turned back into a standard Anim by using *MakeAnim*, an old workhorse of a program which is still going strong.

LhA

The best archiving program available



for the Amiga, *LhA*, has now hit v1.38 in its freely distributable version. There are many small improvements and bugfixes from the earlier public release, 1.32, but unfortunately *LhA* STILL can't be registered in Australia; registration costs \$US20.

WalkingMan

I have a weakness for really silly things, and the *WalkingMan* screen hack falls into this category. Run it, and a little stick man appears on your Workbench, or indeed whichever screen you have to the front, and clambers cheerfully around on the graphics, occasionally jumping for joy or producing a light bulb to see his way through a dark bit.

You can turn on up to five more of the amiable little chaps, should you want to. It's a great thing to do to someone else's computer while they're away, and I've found that unlike many such hacks, *WalkingMan* is very stable and unlikely to cause a failure - but still, don't run it unless everything's saved just in case ...

While we're on the subject of stupid little hacks, I recently came across one called *LRH*. The RH on the end of the acronym stands for Reset Handler - it's a program which produces a delay whenever you reboot to stop horrible disk errors happening when you boot before a write operation's completed. The L, however, I shan't tell you about - the surprise is lovely ... Unfortunately it doesn't work as a reset handler unless you've got an accelerated machine, but you can run the, ah, effect by running *LRH* from the CLI with any option - say "LRH v" - but anything will do.

ToolsDaemon

Users of Workbench 2 have plenty of advantages, not the least of which is the ability to completely avoid the use of the CLI for virtually all tasks. If you don't have a fast machine with hard disk, though, it becomes hard to navigate around various utility disks, waiting for icons to show up - and even we power users get annoyed at fishing through sub-directories for a program.

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Amiga graphics and multitasking capabilities are just part of the reason for this growth. The real reason is that it is the easiest and most adaptable Computer around. Amiga has found its way into just about all areas of human applications, research, education, science, video, music, animation, business, desktop publishing, art etc etc. The list goes on.

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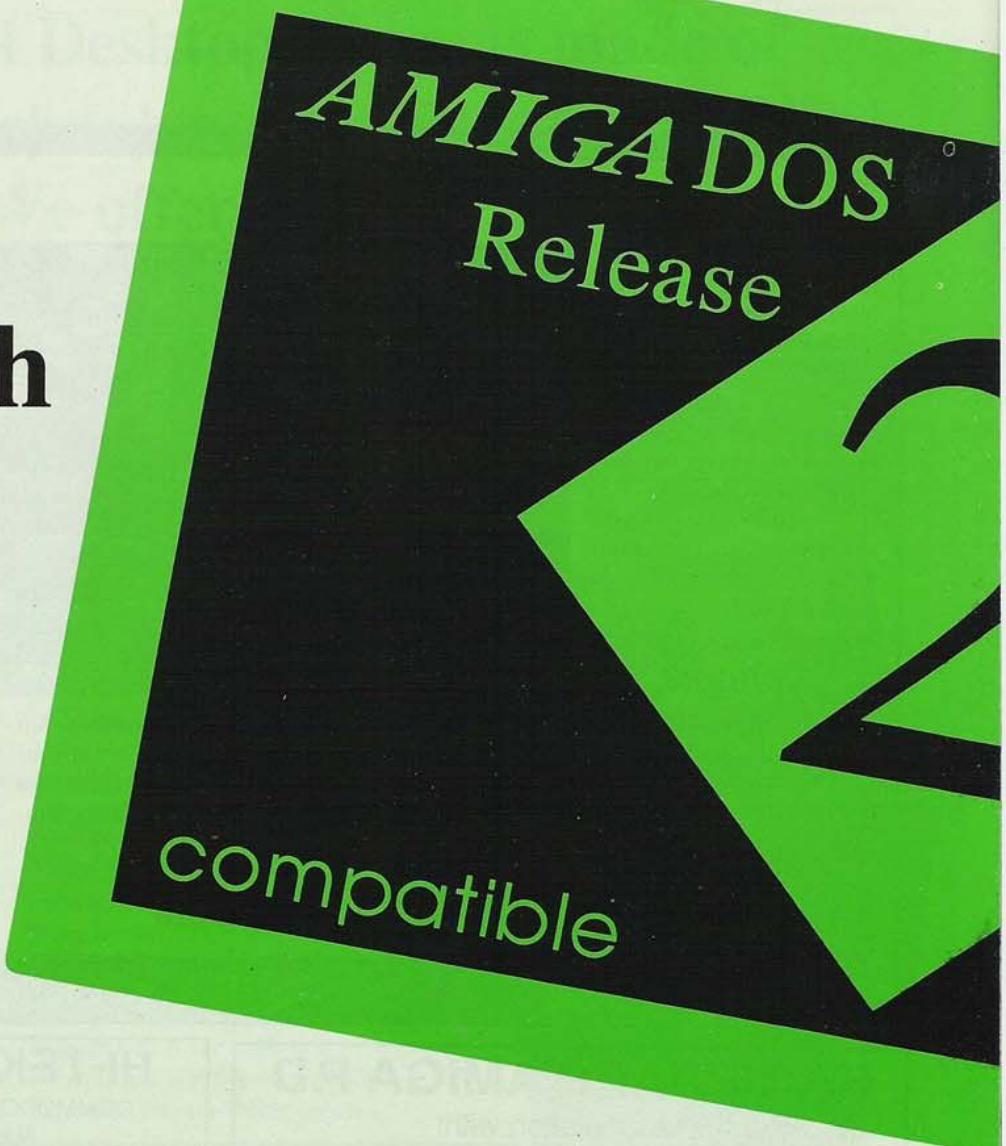
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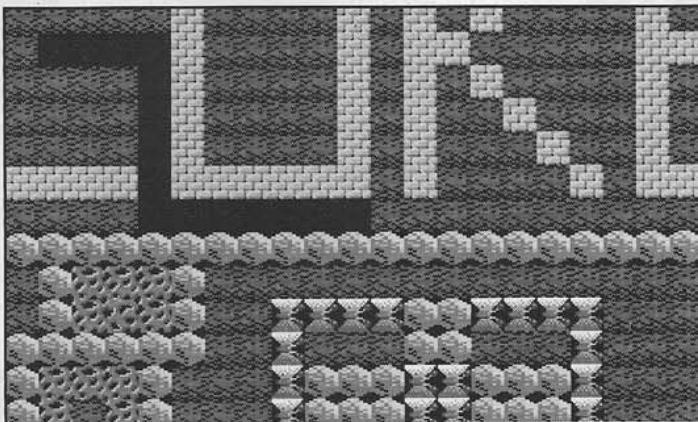
This major upgrade is the result of intensive efforts by Commodore to bring the Amiga operating system to a new level of functionality. WB 2.0 offers profound improvements in stability and flexibility while retaining the combination of power and ease of use that are the hallmark of Amiga.

Demand for WB 2.0 will be very high as most Amiga owners, following in the WB 1.2 to WB 1.3 upgrade tradition, are now looking forward to WB 2.0. In Australia and NZ there are over 200,000 Amigas. Place your order now to avoid lengthy delays and enjoy the transformation of Amiga soon!


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So a tool to allow you to run any program, script or other process from a menu on the Workbench is lovely. This is what *ToolsDaemon* does - with a simple WB2 user interface it lets you set up as many menus on your Workbench titlebar as will fit, complete with submenus, and configure them to do just about anything.



Deftool2

Which brings me to another cute gizmo for the Workbench titlebar, which isn't brand new but has proved so useful that I feel it deserves a mention - *Deftool2*. This little utility, when run, adds a "Set Default Tool" option to the Tools menu, which when selected with icons highlighted lets you globally change their default tool, to easily make a load of different textfiles display with on program for

example. Unfortunately, if you try to run *DT2* and *ToolsDaemon* together in your WBStartup drawer, they'll clash and you'll get some strange RAM faults. Simple solution - run Deftool later.

PPData

PowerPacker 4 is a very popular commercial cruncher, and one of its most

useful features is the ability to compress data files - usually text - for much easier storage on floppy based machines. But if all you want is this data compression and you don't want to pay for *PowerPacker*, you can use *PPData* instead. *PPData* makes use of *PowerPacker's* library - which is freely distributable - to crunch data just as well and just as fast as PP4, and it's easy to use. You need Workbench 2 to run it.

Omega Race

I am a devotee of classic arcade games. None of your modern pixel-scaling warp speed graphics-fests - give me some nice two dimensional vector graphics and buzz-pop sound effects any day. One of the lesser known of this breed is *Omega Race*, a game in which you buzz

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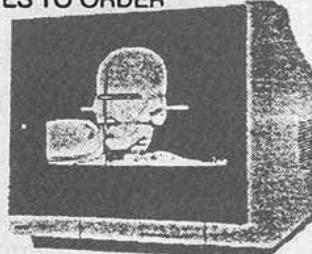
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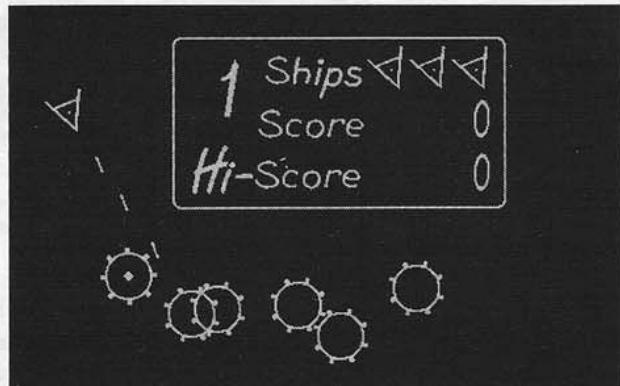
POST CODE

round and round an oblong centre block (containing your score and status) on a screen fenced with bouncy force fields in a quest to blast the heck out of everything else. Everything else in this case is slow, dumb Droid Ships, more agile and aggressive Command Ships, blistering Death Ships and two flavours of mines.

It's not a perfect conversion but it's just as good in my opinion, and it provides a refreshing change from the gift-wrapped fairy floss that passes for gameplay these days. *Omega Race* is a little touchy about systems; I couldn't make it run from hard disk under Workbench 2, and WB2 gives it graphic glitches anyway. It's fine under Wb1.x.

Yet another Emerald Mine

Another game which fully deserves to be called a classic is *BoulderDash*. A



load of hackers have taken it upon themselves to maintain the great tradition of this game by releasing many versions of their own *Emerald Mine*, like the original *BoulderDash* only more so, with gates, bombs, dynamite, trackers, round munchers and plenty of other strange phenomena, along with the traditional butterflies, rocks, gems, amoebae ...

The latest version of *Emerald Mine* is number 17, and runs fine on any Workbench 1.x system with 512K of chip

RAM. If your system's different, you're stuffed, since it's very oddly coded. Apologies for the somewhat dodgy colours in the accompanying screenshot, since the programmers put their palette somewhere my Action Replay couldn't find it and I had to recolour it myself. It gives you the general idea. *Emerald Mine* 17 is available from all good PD houses.

QMouse

A popular "everything utility" for Workbench 1.x users. Until recently there was no WB2 equivalent; Dan Babcock has rectified this with a tiny (3.5K!) version which gives mouse acceleration, mouse and screen blanking, PopCLI, click to front/back, SunMouse, auto window activation after flicking screens, drive click disabling, #?/* toggling for CLI and the ability to completely disable

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DisplayBeep - the DOS function used by some programmers to make the user's life a misery with excessive screen flashes and audio effects.

PgmToShd

While the standard Amiga has 4096 colours in its palette, grey scale images only have 16 shades - pretty pathetic. However, the A500/2000 has a composite video output which can deliver 151 shades of grey to any monitor that takes composite input - which is all the cheap ones. To do this you need to remap your images with the program *PgmToShd*, display them with any standard IFF ILBM display utility and switch to composite on your monitor - if you've got a 1084 or clone this just means pressing a button.

Voila - 151 shades of grey! Unfortunately, you need the PBMPPlus library of graphics manipulation routines to convert your images to the original PGM format, so I've not bothered to put this fairly esoteric program onto my Hot PD companion disk. You can find *PgmToShd*

on Fish disk 694.

AIBB to 4.61

If you want to know how fast your computer is in comparison with someone else's, you use a benchmark program. Amiga Intuition-Based Benchmarks is becoming the de facto standard for speed comparison in the Amiga world - it runs all the standard tests as well as "real-world" tasks like BeachBall, and you can easily run all of the tests automatically and make a module file representing the speed of your machine, which is portable to any other Amiga running AIBB for comparison purposes. The current version of AIBB is 4.61; the earlier 4.56 had a major bug which caused it to hang on some machines when checking for a Memory Management Unit (MMU); I know, I did it! The current version fixes this problem and some more besides.

Numpad

Amiga 600 users may be irked at the

absence of a keypad, making control of some programs awkward. Commodore have addressed this problem with the Numpad program, which remaps a chunk out of your QWERTY keyboard to behave as the keypad when you press caps lock. Not a perfect solution - a numlock key would be preferable - but usable.

BootX to 5.11

Anyone who spends money on a commercial virus killer package when they know *BootX* exists is a mug. *BootX* is free and does the job as well as or better than anything else on the market, full stop. The current version of *BootX* is 5.11; this is a bugfixed release of the main program (sans brain file and other ephemera). The last full release, including all the extras, was 5.10. *BootX* 5.11 is all the virus protection anyone could ever need, but you need Workbench 2 to run it; the last version to support WB1.x was v4.5, included on my last the companion disk; fortunately the earlier versions can load the same virus recogni-

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tion files so you're not left out in the cold if you haven't upgraded yet.

Term

I am an inveterate *NComm* user. I'm used to it, and it does everything I want to do. However, Workbench 2 users who are not so hidebound in their choice of terminal program would do well to consider *Term*, an AmigaDOS 2 only program with many interesting features, amply documented and easy to use. The current version is 2.3, and adds an improved phonebook, better clipboard support, improved terminal routines, small AREXX improvements, bugfixes and improvements to file transfer, better modem control and plenty of other improvements and bugfixes.

Unlike *NComm* and *JR-Comm*, both ShareWare, *Term* is GiftWare - if you like it, send the author a present of appropriate value; he suggests a few in the documentation. I like this concept almost as much as PostcardWare, though it lacks the audacity of one program I struck some time ago which said "Merely

by looking at this program you agree to give me all rights to your firstborn child."

For reasons of space, *Term* has been omitted from the companion disk for this column. You can find it on Fish 725 and 730.

CFX

Readers of last month's column would have noticed that I mentioned *CFX* (Crunched File Examiner), and said it was on the companion disk for that column. This was incorrect, since Bob Rye, the author, does not wish *CFX* to be distributed by any organisation which makes a profit from PD software compilations.

How he reconciles this with allowing Fred Fish, who most certainly makes an excellent living from his invaluable public domain service, to distribute the program I cannot fathom, but in acquiescence to Mr Rye's wishes we removed this program from the disk before announcing its existence publicly.

In an updated version of his covering documentation Bob states that it is physi-

cally impossible for anyone other than him or two other people he names to support *CFX*. This too mystifies me. You can obtain a copy of the freely distributable - well, sort of - unregistered version of *CFX* by sending Bob a blank disk; his address is 11 Beaver Street, St Albans, Vic 3021. Registration is \$25.

Where To Get It

As usual, all of the stuff mentioned in this column (except where otherwise noted) I've compiled onto a disk available from Prime Artifax PD, called HotPD3. To fit all the stuff on I've had to archive it all, but every program's in an individual archive so people without hard drives won't have to wrestle too much with *LhA* and its confusing command structure.

I've also decided to forego icons (time to learn your CLI or get DOS 2, folks) since they don't help at all with archives, and I've trimmed off all the source files, makefiles, foreign manuals and other ephemera only of interest to programmers where the author permitted.

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The C64 Column

by Owen James

New Floppy Drives

Currently under development at CMD are at least two new 3.5" drives for the C64/128. The FD-2000 is fully compatible with the 1581, but will be able to hold up to 1.6 megabytes using standard high-density disks, or 880k using 3.5" double-density disks. The second, the FD-4000, will offer the same capabilities as the FD-2000, but will also be capable of storing up to an amazing 3.2 megabytes using 'Enhanced-Density' disks.

Both units will be fully GEOS compatible, and make use of JiffyDOS. Disks can be divided into subdirectories in a similar way to MS-DOS and AmigaDOS. It is expected that both units will be available by early next year.

geoCANVAS

Also available from CMD is a new *geoPaint* alternative titled "geo-CANVAS". From what we've heard so far, the program is massive, and will require geoRAM or a similar REU with at least 512 kilobytes of RAM. Evidently it does suffer from the "released before it's ready" syndrome, so there are incompatibility problems. Watch this space.

The very popular *Mini Office* package, which was originally released on the

C64 back in 1984, is about to be relaunched as an Amiga program. *Mini Office* consisted of an integrated Spreadsheet, database, word processor and graphics program. I wonder how many other old C64 programs will eventually be ported.

Offline Mail Reader

This time for C128 users, a new Australian shareware program has been released to give 128 users a QWK compatible offline mail reader. Adhering to the .QWK format standard, *QWKRR 128* allows BBS users to download mail packets, read, reply and write messages offline, and create new packets for uploading. To run it you'll need a C128 and an 80 column monitor. A printer is optional. Unregistered copies are now available from most BBS's with a C64/128 support area, or registered copies are available direct from the author, Rod Gasson at 90 Hilliers Rd, Reynella, SA 5161 for \$20. A full review of *QWKRR 128* appeared in the August edition of Commodore Network.

New Disk Magazine

Brunswick Publications is now producing a regular disk magazine for the

C64/128. New issues come out every two or so months, and provide many useful and interesting articles for the C64. You cannot actually BUY the magazine - it is a free service to all of Brunswick Publication's regular customers. Brunswick can be contacted by writing to PO Box 458, Bondi Junction NSW 2022. Next month we'll be reviewing some of the new public domain titles from Brunswick Publication's library.

Crossword Software

This month we're going to take a quick look at *The Cryptic Crossword Game* and *How To Solve Cryptic Crosswords*, both from WSW Software.

For those of you who don't know, *Cryptic Crosswords* are a variation on the regular type of crossword puzzles in which the clues are a puzzle in themselves which must be deciphered before you can arrive at the correct answer. They can be very difficult for the novice, but far more challenging than the regular types of puzzles.

The Cryptic Crossword Game is a computerised version of these types of puzzles. It provides six different puzzles, and as you might imagine, some are more difficult than others. Using a joystick, you select which clues to attempt to solve from a series of pull-down menus. An included printed grid will help to identify the clue numbers, as the numbers aren't reproduced on the screen grid.

The whole program is based on a Graphic User Interface, similar to GEOS. It is inclined to be a little awkward at times, as many of the hit boxes are too small to easily position the arrow over using the inaccurate joystick. This aside, it is simple and straight forward.

Perhaps the only thing missing is a "Save Game" feature. As the actual puzzles are very challenging, it may take more than one session to complete a puzzle. As it stands, you are left with no option but to start over each time you want to play.

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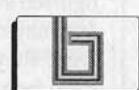
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Hot Games

Grab our latest four Hot Games disks, and you have the best public domain games around. Add to that our first four disks and you have eight disks crammed full with games for \$28 - Not bad value! From arcade, to strategy, and many classic remakes.

DOS Utilities III

Two disks of great programs to help when Workbench alone won't do. Recover deleted files, edit disks, look for lost ASCII, check out disks for hidden text. Crunch, archive and move files around, backup disks using SuperDuper and Optimise your disks for faster access times.

MS-DOS Pack

Read and Write to a 720K MS-DOS disk from within any program. Move text, database or spreadsheet files in between a PC and the Amiga. The Emulator disk includes Transformer and a demo of PCTask. Two disks in the set. Also convert graphics to PC.

Aquarium

With over 730 disks of Amiga software in our Fred Fish library, the best way to find the program you're after is with the Aquarium database. Available for floppy or hard drive (please specify) - with as much of the database squeezed in as possible. Great interface.

Each theme disk is compiled by Prime Artifax.

Phil Campbell's Entertainment

All the latest news and views from the world of entertainment ...

EA Acquires Origin

Electronic Arts and Origin Systems Inc announced recently that they have signed a definitive agreement whereby EA will acquire Origin Systems Inc of Austin, Texas. The value of the deal at the time of signing was reportedly around \$35 million.

Origin was founded in 1983 by Robert and Richard Garriot (aka Lord British) to capitalise on the popularity of Richard's *Ultima* fantasy role playing series. During the past three years, Origin has experienced strong growth; the company has a staff of 160, and has published over 30 titles. As well as the *Ultima* series, the merger will add the popular *Wing Commander* series of PC games to the EA stable - a worthwhile acquisition!

"The acquisition of Origin by Electronic Arts is an excellent fit," says Larry Probst, president and CEO of Electronic Arts. "It will enhance our position as the leading worldwide independent publisher of entertainment software."

However, at this stage Origin's products will still be distributed in Australia by Mindscape International.

Battletoads Coming

Based on the popular cartoon series, Mindscape are about to release the Amiga version of *Battletoads* - the game has already been released on Nintendo and Sega. Recommended retail price will be \$69.95.

TV Sports Baseball and Nick Faldo's Golf

At last, Cinemaware's *TV Sports Baseball* is about to hit the streets. Distributed by Mindscape, the game is the long awaited sequel to *TV Sports Football* and *TV Sports Basketball*, both of which were incredibly popular. The game will retail for \$69.95. Meanwhile, Nick Faldo, winner of the British open, has put his name to a new golf simulation. Also from Mindscape, this one promises to be good.

Troddlers Coming Soon

Better than *Lemmings*, in this game you chase a bunch of little guys around the screen - more complex and involved than *Lemmings*, I'm told, with 175 different levels. From the Sales Curve, the team responsible for such arcade gems as *SWIV* and *Silkworm*, this one should be a winner.

ACAR Hints Disk 1 and 2

Stuck in a game? Frustrated? Check out our two official ACAR Entertainment Hints and Tips Disks. They're both packed with handy hints and tips for all the most popular Amiga games. *The Secret of Monkey Island* is revealed, we'll give you all the training you need to win at *4D Sports Boxing*, we'll help you save the day at *Austerlitz* - and

Leisure Suit Larry finally gets his girl. All this, and literally hundreds more - all the tips ever printed in ACAR, plus a whole lot more collected by our hint guru Adrian Jenkin.

How do you get it? Simply decide whether you want disk 1 or disk 2 - or both - then send a blank Amiga disk for each disk required, plus a cheque or postal order for \$5 per disk, and a stamped, self addressed envelope to Phil Campbell, PO Box 23 Maclean NSW 2463. Please specify clearly whether you're ordering Disk 1, Disk 2, or both.

Mindscape Fire and Ice Competition Winners

We certainly sorted out the sheep from the goats in our September competition - especially with question 5! So, without further ado, here are the answers.

Yes, I know plenty of people have recorded *Fire and Rain*, but James Taylor was the answer we were after. Most people got it right.

For the physicists, the triple point of water is the temperature and pressure at which ice, water and steam can co-exist in equilibrium. It occurs at a temperature of 273.16K, or around 0.01 degrees Celsius.

Emperor Nero reputedly fiddled while Rome burned, though bright historians have pointed out that fiddles were not invented until considerably later.

FRIED RICE is almost an anagram of FIRE AND ICE; and finally, the question that brought many readers unstuck - ice floats, which is a great relief to many fish. If it didn't, ponds would freeze from the bottom up, leaving all the little fishies either frozen solid, or flapping around on the top of the ice! A sympathy prize almost goes to the reader who said "Ice chills the gills and cools the schools." Nice try - but not quite!

So, the winners are:-

1. W. Harris, Miranda, NSW
2. P. Pascoe, Paddington Qld
3. Tom Bourke, Silverdale NSW
4. Jack Williams, Manly NSW
5. Max Monahan, Croydon, Vic.

Next Month ...

The best soccer game yet?

In your December ACAR, Phil Campbell playtests *Liverpool - The Computer Game*. Yep, it's another soccer sim, and it's a beauty! Watch for a full report.

Martial Artistry

Who'd wear a belt round their pyjamas? Well, Dojo Dan would, for a start. And if I was you, I wouldn't laugh! Dan's the star of the latest platform hopping martial arts extravaganza, *Dojo Dan - Juris Graney checks it out next month, and finds that the gameplay is "booming"!*

And much, much more ...

We hook into *Hook*, we go crazy with *Crazy Cars III*, and we just generally have the same sort of mighty good time as always! Stayed tuned for the December edition of Australia's longest running Amiga magazine. Our track record speaks for itself!

ENTERTAINMENT HINTS & TIPS

Need help? Then start here! We've got a stack of Amiga hints, and a couple of C64 goodies thrown in as well. If you're the talented type who can offer advice on games you've completed, or if you've found some handy tips or cheatmodes, please drop us a line. Write to Phil Campbell, PO BOX 23, Maclean NSW 2463.

Here's a cheat for that infamous *Robocod*: Press CTRL and the screen will flash. Now press RETURN to become invulnerable.

Mandscape Competition

This month Mindscape are giving away four copies of *Crazy Cars III* - I've just been playing it, and it's incredibly fast, smooth and colourful.

Let's make this one REALLY easy! Simply write your name and address on the back of an envelope, together with the name of your favourite five Amiga car racing games, and mail it to:



November Competition,
c/o Phil Campbell,
PO Box 23, Maclean NSW 2463.
Winners will be advised in the January issue.



In *Last Ninja III* there is a special way to reach all six levels. All you do is type on the high score screen one of these six level codes: 1. SUSS 2. IMED 3. URTI 4. BASD 5. NOUS 6. RERO

Asta La Vista Baby. I know that's a pretty sick way to introduce *Terminator 2*, but it works. Well, to make ol' muscle bound Arnie skip levels, simply PAUSE the game and press the Function keys in order, then unpause it. Now pressing ESC will skip levels.

The movie *Predator 2* was considerably better than the first. Mostly because Arnie wasn't in it, but also because of the setting. Anyhow, pause the game and type in "YOUR ONE UGLY MOTHER ____" twice and unpause the game. Use your imagination for the dashes. (*Editor's Note: I know that's not how you spell "YOUR". But maybe programmers can't spell?*)

Thanks to somebody for these cheats. Sorry, but I lost your name.

In the excellent game of *F-19*

Stealth Fighter, press ALT-R and then ALT-T for nine of everything. This cheat from Andrew Downes.

Booty - on the title screen hold down the keys K E V I N for cheat mode activation.

C64 cheats

Now for a real treat. Thanks to the support of some C64 gamers, we have now accumulated a fair number of C64 cheats - well, two anyway! My sincere apologies to the '64 readers out there, but without your support, the C64 column has shut down indefinitely - we'll include C64 tips here as they come to hand.

Robocop

To get to the last stage type DISAPPOINTED on the title screen

Silent Service

To replenish your supplies, simply hit the RUN/STOP key and when you see the cursor, type in RUN then hit ENTER.

Entertainment Letters

Send your entertainment letters to the Entertainment Mailbox, c/o Phil Campbell, PO Box 23 Maclean NSW 2463. Keep your letters brief, to the point, and entertainment related!

Help Given, Help Wanted

Dear Phil, In your August column, S. Symonds asked for help on *Willow Pattern*. After you reach the girl, you must take them both to the waiting boat, avoiding her father.

Now a request, can anyone sell me an original copy of *Doomdark's Revenge* or *Deux Ex Machina*? Also, I collect old English computer magazines (8-bit, all formats, any condition), and I will buy or swap. I especially need ZZAP!64 #1 (will pay well).

Marc Walters

Ed: If only I'd known there were magazine collectors out there! I chucked out my collection of old English computer magazines last year. But maybe we'll find another reader who can help. Thanks for the tips.

Cheat Mode Queries

Dear Phil, I haven't got a reset switch or anything like that so when I want to make a game easy for a friend I have to rely on non-poke cheats, but what I would like to know is how to find non-poke cheats. How does typing a word or two on the title screen or high score table work? Also is there any way that a C64'er can find non-poke cheats with a sector editor, if so, what do I look for?

I have also accumulated a whole load of complete solutions and wish to share them. If anyone would like a list of my solutions send me a SSAE and I will see if I can help them. Jason Aldridge, 9 Dunn Place Coffs Harbour.

Ed: Non-poke cheats are often referred to as "back-doors". They're inserted in games by the programmers, mainly to help them test their programs while they're under development - but also, I suspect, to keep you young hackers hacking!

Typing a word on the title screen or highscore table works purely and simply because the program code is waiting for just the right combination of characters to activate the cheat mode by disabling sprite collisions, or, more commonly, by not decrementing the life counter byte. Can you find non-poke cheats with a sector editor? Yes - usually by scanning through all the code in ASCII format, looking for unusual sets of characters like "BUCKAROO" or "PHIL CAMPBELL HAS THREE HEADS." Then simply try typing them in anywhere you can think of - you never know your luck.

A Shadowy Problem

Dear Phil, This is a great magazine! Keep up the good work! Sorry I can't buy it that much, but when I do get it, it is great. I need some help in *Shadow of the Beast II*. I can get into the crystal caverns are captured by the goblins, escape, kill the goblin guarding me but can't get back up. I hope someone can help me.

Jesse Hayward

Ed: Yeah, Jesse, but what happens if someone sends in an answer and you don't buy the magazine? Oh well - let's just hope for the best!

Entertaining DTP?

Dear Phil, I need to purchase a DTP. The only problem is that I can't afford a commercial one, so what I am asking is if there are any DTP's on PD. If so, where can I purchase one? By the way, great magazine. One other thing, I have noticed that the Hints & Tips section has been left off on occasions. Is it because you are not receiving enough or is there some other reason?

David McLeish

Ed: Boy, David, you must be incredibly thick. You should know better than writing to the entertainment

section about DTP! We don't deal with boring stuff like that. Anyway, the answer is no, there aren't any PD DTP programs available yet, though I hear a rumour there's one on the way. As for hints and tips, you're right - readers have been getting a little slack!

Might and Magic II

Dear Phil, Could anyone tell me what to do after completing the quest for each character in *M&MII*, achieving the triple crown, and visiting Queen Lamada. She told me to go see Lord Peabody, but he's giving no clues away, and I'm wandering aimlessly around Cron.

Sharon Morris

Ed: We'd hate to see you lost forever on Cron, Sharon, so we'll see what sort of help we can dig up for you. Keep watching this space!

Body and Soul Re-Union

Dear Phil, Here is the answer to Robert Di Donato's problem in *Might and Magic II*. To re-unite Corak's soul with his body:- First get Corak's soul from location C1-10, 15 and take it to his body. Only clerics get past the invisible barrier.

As for the messages - write them all down, including spaces and punctuation, in this order... 8,5,2,6,1,3,9,7 and 4. Then write down the first letter in all nine messages then the next two letters of all nine then the next three and so on.

Graeme Beaven

Ed: Thanks for the tips, Graeme. I sure hope that last bit makes sense to somebody, because it looks pretty confusing to me!

Tip for Budding Tycoons

Dear Phil, A really good hint for *Railroad Tycoon* is to buy the book "Railroad Tycoon: Master Strategies for Empire Builders" by Shay Addams.

David Latham

Ed: Yeah, I'll bet Mr Addams is your uncle. Or else you run the publishing company? Anyway, we'll take your word for it this time, and pass on your timely advice. Thanks for the tip.

Why did Napoleon keep his hand in his jacket? So he could say he won all his battles single-handed, of course. Mmm. Well, the good news is, Greg Munro says here's a game about Napoleon that's a whole lot better than that joke ...

Great Napoleonic Battles

Wargamers, take a look at this one! *Great Napoleonic Battles*, from Impressions, is a true wargaming package that is even more fun than moving cardboard pieces round a hex-map of Europe with a pair of tweezers. (All you "shoot-em-up" addicts who think that sounds pretty boring, can turn the page NOW!)

Great Napoleonic Battles is as complex and historically accurate as cardboard games, but you don't have to roll dice and consult combat tables to resolve battles - Ami does it for you. Best of all, you don't have to worry about the cat rolling on the map and wiping out Wellington's Army.

This is more than just a game. It's a whole gaming system. With it you can custom-design your own battles and armies. There are four programs. BATTLES allows you to play the game. The others, MAPMAKER, MENMAKER, and WARMAKER, let you create new maps, armies and rules. These creations are all within certain parameters of course, but with a little ingenuity and a lot of patience, you can recreate any historical or imagined battle of the period. You can use any combination of saved RULES, MEN, and MAPS to create a scenario. You might load the existing map and armies for Waterloo, but use your own RULES (created and saved using WARMAKER), for example.

Three battles are already on disk. Contrary to the opening music sequence - Tchaikovsky's 1812 Overture of course - the battle of Borodino isn't

one of them! They are all battles in which the French did badly - Marengo, Quatre Bras, and Waterloo. The last two were parts of the same disastrous engagement in June, 1815. Your objective is to reverse the historical result for the greater glory of the Republic.

The battlefield maps are impressive. Maximum size is 100x100 hexes (six screens wide by nine down). When designing your own maps there are over 150 terrain hex-pieces to choose from, grouped into eleven types. Each type has its own effects on attack, defence, and movement by cavalry, infantry or artillery. Higher positions are easier to defend, harder to attack. You can change the rules for this yourself using RULEMAKER. The only criticism of the mapping I have is that the map displaying the whole battlefield at once is too small to be of use.

The antagonists are shown as Blue and Green pieces on the map. In the battles which come with the game, Blue represents the French, and Green the Allies. Both sides can be controlled by humans or computer.

Gameplay has TURNS consisting of two PHASES. In the MOVEMENT phase units are positioned for battle. The second phase, COMBAT, has two parts. First, you designate targets for each attacking unit. Second, these designated conflicts are resolved, and units either advance victorious, are stalled, retreat, are routed, or are annihilated.

You create different levels of play by varying the realism. For example,

FACTBOX

A wargamer's delight! It's detailed, it's clever, it's well researched - in short, everything a war-fiend could possibly want.

Distributed by DirectSoft (02) 489 7853. RRP \$79.95.

Ratings:

Graphics: 77%

Good, for a hex map war game

Sound: 47%

Lousy - a few explosions, etc.

Instructions: Excellent

Playability: 78%

Good, but too many keyboard commands

Addictiveness: 95%

Overall value: 90%

you can have all pieces shown all the time, or choose the more difficult "Fog of War" option, where enemy troops are only shown when close to your own forces. Enemy strength and movement ability can be hidden or visible. You can have morale and possible unit disarray taken into account or not. You can turn on the option where orders to remote units will be delayed. You can have generals act like their historical counterparts or react in entirely new ways. You can change just about anything you can think of!

My Waterloo battle is progressing in a remarkably similar way to the real thing. Unlike Bony, I managed to take Hougoumont and wipe out the British and Hanoverian defenders. But now that Blucher's Prussians have arrived, I find myself marshalling my forces for a gallant last stand at the farmhouse of La Belle Alliance! Oh well, St Helena's supposed to be nice at this time of year.

Great Napoleonic Battles is a versatile, well researched and designed program that is fun and challenging to play for those with the patience for this type of strategy game. The manual is well written and contains much interesting historical stuff. If wargaming is your thing, GNB is definitely worth the money!



Wanna ride to a place where the sun always shines, where the guys are cool and the chicks are ... well, you get the idea. Yep, it's the sequel to end all sequels, as Phil Campbell checks out.

Yo, dude. Radical halfpipe, man. 'Ain't no dweebs 'n posers gonna thrash with you.' Huh? I thought jive talk went out with the sixties. But apparently, it's alive and well in sunny California - the land of fun and games. At least, it is according to the manual that comes with *California Games II*. The box is loaded with little gems too, like "Get majorly amped as you carve a wave," and "Dodge a few grommets to max-out your score." Boy, I sure wish I knew what they were talking about.

One thing, though, is perfectly clear. In my hot little hand is the sequel to the original *California Games*, a million-selling collection of addictive and unusual sport-sims released back in 1989.

Again, there's a curious collection of events. First, you'll try hang-gliding at San Francisco's Fort Funston. Then there's a helicopter ride to the top of a nearby mountain for a wild Snowboarding run. A Jet Surfing competition on Monterey Bay, Bodyboarding at Santa Cruz, and Skateboarding down the California Aqueduct complete the collection.

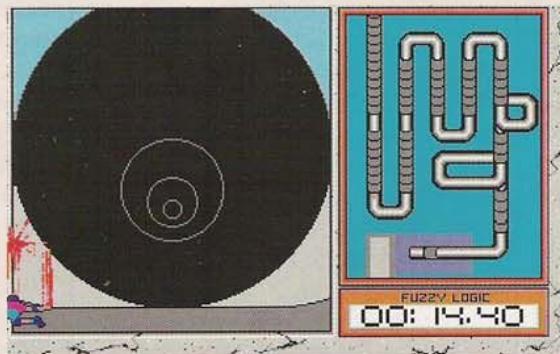
Up to eight players can compete - one at a time - and the object of the game is to score well in every event. The player with the highest score at the end of the game earns the title "Supreme Dude." Some incentive.

Points are awarded in the Hang Gliding event according to the number of stunts you perform, and

your accuracy in dropping water bombs on a series of targets floating in the bay. Manoeuvring your joystick controls the tilt on your glider - it's all a matter of finding the right thermal updrafts to keep you in flight.

Body boarding is pretty ... um ... radical. A pulsing rock'n'roll sound track sets the tone as you paddle your board into the waves. Wait for the right moment, and you're on your way - paddle up and down the wave face and throw in a few fancy turns and spins before the wave breaks to maximise your score. Then dodge the middle aged tourists and other assorted dweebs as you hurtle towards the shore. Fun, fun, fun.

If you're looking for a challenge, try illegally skateboarding down a half-pipe aqueduct. It's more dangerous than it sounds. Just when you've mastered the rhythm of riding up and down the sides ... WHAM! You're face to face with the concrete end-wall of a full-pipe drain.



FACTBOX

Like most sequels, *California Games II* doesn't quite reach the standard of the original. Still, if you're looking for some multiplayer fun, it could be for you.

Distributed by Mindscape, (02) 899 2277. RRP Amiga \$69.95.

Ratings:

Graphics:	72%
Sound:	76%
Gameplay:	65%
Overall:	69%

Unless you judge your entry point perfectly, you'll literally be splattered all over the neighbourhood. Not a pretty sight.

Jet surfing sounds thrilling. It isn't. There's a choice of four Jet skis, and a range of courses, including one with some hair raising ramps. Problem is, in the end it's all just a matter of keeping the jetski on track by steering between two bobbing rows of buoys. Out on the bay there's not much scenery, so it all ends up feeling a little mundane. And the Snowboarding event is not much better.

I played the Amiga version of *California Games II*, and the graphics are more adequate than dazzling. There's a confusing mix of "realistic" and "cartoon" style characters, leaving you wondering how seriously to take the events.

And the colour palette lacks finesse, leaving the Californian landscape looking stark and flat. Yes, I know that's exactly how Californian landscapes are meant to look - but a bit more artistic subtlety would work wonders.

In fact, overall, *California Games II* lacks the pizzazz that made the original collection a million seller. The formula is a little tired, even with the liberal doses of jive talk smattering the game. "Majorly amped" I certainly wasn't. The strength of the game, however, lies in the multi-player approach - grab a bunch of friends, and you'll immediately add the competitive edge that's missing in one player mode. And with five events on offer I can almost guarantee you'll find something at least a little bit radical ... if you know what I mean. □

A.G.E.

Agent Peter Christopher sets off on a mysterious quest through an unpleasant landscape. What will he find?

I need to find Dale. I have a rendezvous with him in the Centurians bar, wherever that may be. I don't know what Dale's going to tell me but that's my mission and that's what I'm paid for as a top member of Sersec, the Imperial Secret Service.

I'm in Shade, the capital city of the planet Kaiser in the Methik system. The planet is an unhappy place, where power is in the hands of the corrupt despot Konrad Lonasi. It's a place I've never liked. It reminds me of the Earth's deserts but with far more dangers than snakes, centipedes and coyotes.

I always seem to run into unsavory creatures like the shark lion, the jelly fish that floats over dry land and the ugly merchants, who rip me off when they know I'm desperate to buy something.

Anyway, here we go. Wherever you are, Dale, I'm coming to find you.

This is A.G.E., a strange game, set in a strange place, and played in a strange way. That's not to say it's bad, just that it's different.

You drive your capsule, for example, by moving your mouse backwards and forwards. And despite the fact that you're hovering above the ground you still must follow roads. Other functions are keyboard-driven.

In the cockpit there are no fewer than 26 displays including the obligatory compass, thermometer, communications window and also cold and hot alert, combat dose level, oxygen level and the alarming alert windows which warn of impending death. And there seem many ways

this can happen.

The game's kick-off is impressive to say the least. Very futuristic, very detailed and very promising. But the title graphics are a cut above the game itself, as is often the case.

The best way to describe the look of the game is to liken it to FA18 but with different and unattractive colours. It has the same "boxy" filled vector style graphics, but not as well done.

You travel along roads which have many deadends. In some you'll find useful things to pick up or buy - grenades, laser gun replenishers and the like. Some are free, some you have to buy from the merchants, if they're willing to communicate. If they're not, watch out.

There's only one way to play the game and that's trial and error because if there's one major criticism then it's the manual, which leaves you pondering what on earth - or Kaiser - you're in for. It's of little help for what is about to come.

So let me take you on a short journey.

Secret Agent Christopher takes off from the port and sees a side road, where I find Kaiser's equivalent to a

FACTBOX

Quite unattractive to look at, and not for shoot-em-up or speed freaks, but a game that will fill a niche with puzzle fans who still want a bit of action.

Distributed by Dataflow (02) 31020. RRP \$79.95.

Graphics:	58%
Sound:	62%
Gameplay:	69%
Overall:	60%

service station. Pressing the cursor button activates the robot to top up everything including weaponry and life support.

Moving on from there, the next stop on this desert-like road is to speak to a roadside merchant (very ugly) who may or may not have something valuable to sell.

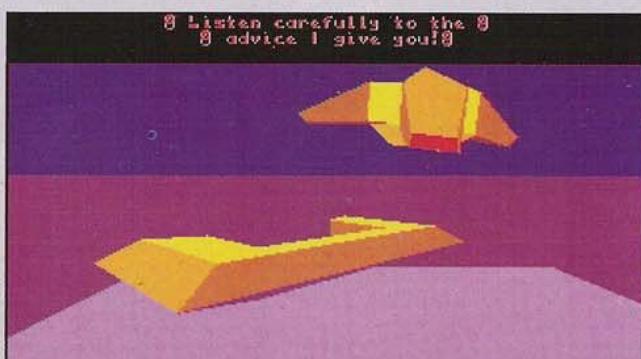
In this case he has. It's a grenade. You click again and he responds on the communications window. Click twice more and you succeed in buying, then "grabbing" the grenade and storing it for later use.

You can only have one weapon or defence up and available at once and one of the many things you must do is decide what works best in what situation. For example, some critters who block your path can't be killed by lasers and need the full grenade treatment.

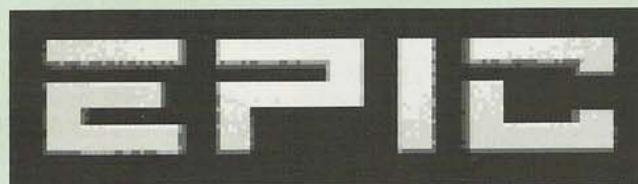
Another weapon you can buy is a degasser ... presumably to counter a monster with wind. I've not struck him yet.

In fact, someone else I haven't found is Dale.

A.G.E won't please shoot-em-up and speed freaks but fills a niche for the game player who likes solving puzzles mixed with a slice of action. I would have been happier with a better handbook. This one tells me what everything does but leaves me wondering why it does it. Give me a call if you find Dale. □



Seldom has a game received so much pre-release hype! Not, of course, from us here at ACAR - we like to wait till we've actually played the game. So read on as Phil Campbell playtests ...



Data Bank 6898/ ref 2.a0: Magillenic is dying - a supernova is imminent. Evacuation is about to begin. Our fleet is massed around the moons of Payne - eight thousand ships, escorted by the mighty federation Battlefleet - ready to set out for the distant planet of Ulyseses 8, on the far side of the Rexton Empire.

Safe passage through the enemy sector has been denied, and the Imperial Rexton Fleet has been mobilised to stop us. So here I am sitting at the controls of my tiny one man fighter, ready to do my bit. The fighter is a Solinar Epic Class 1, powered by two CV drivers producing 1500 trillotons. She'll spin around on a dime, with a 42cf turn rate - and she'll accelerate to a million clicks in 4.97 seconds. Quite a machine. And she needs to be.

I'm part of the first wave, and my mission is vital. First, clear a path through the Zionic mine belt at the boundary of Rexton void-space, engaging and destroying enemy fighters before they detect our presence. Then proceed to Amragan 9 and destroy the orbiting deep space tracking station, all within 122 seconds - the time it takes for the scanner to pass through the shadow of neighbouring Amragan 8.

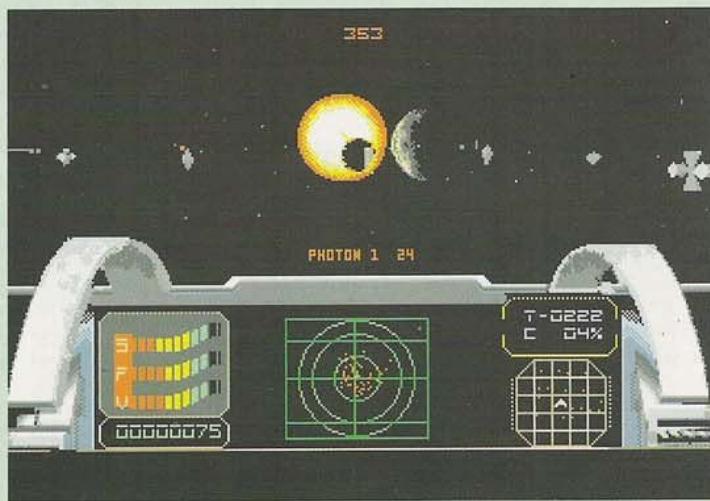
We're in the driver's seat of *Epic*, the long awaited space-opera that promises to pluck the wings off *Wing Commander*, and knock it from its long held perch at the

top of the pile. *Epic*, said the advance publicity, "reaches a milestone in 3D polygon technology, speed, graphical detail and pure out and out playability." That's the promise. The question is, does *Epic* deliver?

Well, the graphics are fine. The view through my front port is beautiful, but frightening. My ship is swimming in a mass of menacing grey space mines - a bewildering array of shapes and sizes, and every one deadly. The purple pinpricks on my scanner screen tell the same story. Thousands of them. And they're everywhere.

The rest of the view is stunning. A sparkling starscape smatters the sky, with the silvered orb of Amragan 9 dangling from nothing immediately to my left.

So far so good. But now for the down side. Now I'll admit, it's no secret that I'm a bit of a klutz - but how can they talk about "playability" in a game that has so far frustrated my best



FACTBOX

Epic looks good, but it sure doesn't match up to the pre-release hype.

Distributed by Ozisoft (02) 313 6444. RRP Amiga \$69.95.

Ratings:

Graphics:	86%
Sound:	63%
Gameplay:	67%
Overall:	74%

efforts to get through Level One? And for once, it's not because of my slow trigger finger. It's simply because I can't work out where I'm meant to be going, let alone how to get there on time. Sure, there are cryptic messages on the screen that tell me to aim for "Heading 319" in "sector B1678". But how am I meant to get there in 122 seconds? Beats the heck outta me!

There's not much help in the instruction manual, either. In fact, it's printed in an unreadably narrow typeface on an unpleasantly cluttered background in an unbearably obscure narrative style. Nice cover though.

There's a total of seven missions, and from the bits of the manual I can actually decipher, some of them sound rather good. So to be fair, I guess I should reserve my judgement until I've mastered this infernal minefield and checked out something more impressive. Then again, one English magazine claims that you'll complete the whole game in less than three hours - unless you're a moron like me.

In short, *Epic* hasn't made a dazzling first impression. Sure, it's worth a look for the sake of the graphics - but if you're working on the ancient premise that a good game should be easy to learn but difficult to master, *Epic* doesn't quite make the grade on either count.

Resident RPG expert Andy Phang decides to give SSI just one more chance to come up with the goods. Find out how they scored in ...

Treasures of the Savage Frontier

It would seem ironic that I've been given the job of reviewing SSI's latest Amiga port, *Treasures Of The Savage Frontier*, especially after my "unforgiving" (for lack of a better term!) analysis of this game's predecessor, *Gateway To The Savage Frontier*. So, how does this latest variant of the very well known AD&D interface fare?

Well, for one thing, it's definitely not as bad as *Gateway To The Savage Frontier*, both in terms of plot and implementation. No, there haven't been any major improvements in terms of music or sound effects (EXACTLY the same as before), but the graphics are slightly more colourful, and there is more variety in the icons that represent your characters during combat. The depictions of all those nasty monsters you will inevitably face in every AD&D game are handled fairly well, and this time they do look mean. Just a little, anyway! There are also a few more "full screen" graphical pictures that pop up here and there.

On the minus side, the game is as slow as ever, and combat can really be frustrating at times. One reason for this is a new feature which allows your party and the enemy to call for help during battles. So, after you thought you had slain the last Eight Eyed Drider and buried the final Left Handed Manticore, one or two additional foes (often really hard to kill ones) might suddenly materialize. Back to work, guys. If you can't kill your foes quickly, you might find their numbers increasing and the num-

bers of your party decreasing!

Other new features include the effects of terrain and weather during (outdoor) combat, greater interaction between Non-Player Characters (which helps develop the overall story, and provides some emotional attachment to your on-screen alter egos), and also a series of subquests and mazes which have no direct relevance to the overall game objective, but provide some extra areas to explore and monsters to fight. You can finish the game and then seek out these places, which is a nice touch as it gives your band of adventurers something to do after building up all those statistics throughout the course of the quest.

"Boss, Boss ... ze plot! Ze plot!". Ah yes, the plot. After your triumph in the ruins of Ascore (way back in *Gateway*), you find the Savage Frontier no closer to peace. The evil armies of the Zhentarim are intent on conquering the land, and it is up to you to make sure that they don't succeed. A tall order, maybe? Not if you manage to rediscover an ancient magical gem lost for

FACTBOX

Treasures of the Savage Frontier is a reasonably competent RPG, and certainly better than its predecessor. However, don't expect flash graphics or sound effects - as usual in an SSI "port", they're very average.

Distributed by Electronic Arts (075 911 388. RRP \$69.95.

Ratings:

Graphics:	65%
Sound/Music:	40%
Gameplay:	65%
Overall:	60%

centuries. Your party sets out in search of this gem, and in your travels will meet up with one or two old friends, traverse the islands that lie to the East of the Savage Empire, be accused of treachery, and finally come to an all mighty difficult battle with an age-old dragon who does not appreciate your party's valuation of his (its?) precious treasure.

Whew! Nothing too difficult for the Heroes of Ascore ... you hope.

Those of you who did make the brave attempt to play *Gateway To The Savage Frontier* (and finish it) can heave a sigh of relief because you can transfer your party over to *Treasures*. After *Gateway*, playing *Treasures* should be much easier on your nerves. While it still doesn't take full advantage of the Amiga's technical capabilities (it's hard to think of a SSI game that does, actually - except maybe for *Eye Of The Beholder*), some credit must be given to the publisher and game designers

Beyond Software for making a better effort here.

Strangely enough, it looks like *Treasures* will be the last in SSI's AD&D Savage Frontier series. Hopefully the company plans to publish more AD&D efforts using its new 16 bit gaming system, starting with *DarkSun: Shattered Lands*. Until then, Amiga AD&D fans will have to exercise their patience (maybe in more ways than one!) and give *Treasures Of The Savage Frontier* a look.



Anyone for tennis? Juris Graney gets dressed in his whites and grabs his raquet as he checks out the latest Tennis Sim from Loriciel ...

Tennis Cup II

The great clash they called it. John McEnroe and Pat Cash. But right from the outset, you could see the new look Pat Cash wasn't like the tennis player we knew and loved. Though he tried hard, John McEnroe was too strong. These two players didn't have any impact on the eventual winner of Wimbledon either - Andre Agassi.

It seems around this time of year, we see an influx of tennis games on the market. Loriciel was right on time as usual. *Tennis Cup II*, as the name suggests is the sequel to the hit tennis game *Tennis Cup*. I never did get to play *Tennis Cup*, but from what I have heard and read about it, it was a spectacular game. Full of features and very addictive. If that was the case, *Tennis Cup II* has followed its predecessor pretty well. *Tennis Cup II* hasn't changed much from the routine of the many tennis games around. Then again, how do you change a game that has been around for around 150 years?

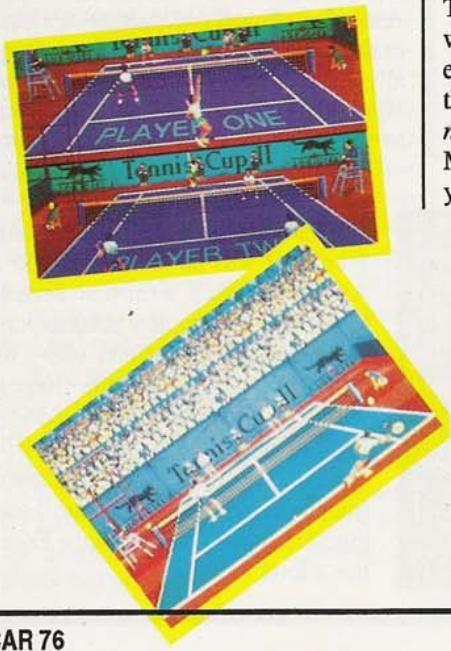
Right from scratch, you can see the

class in this game. Your character is standing in a stadium. Two televisions line a wall, and in the centre is an electric door. On the farthest wall, you can see another electric door. This one leads out onto the practice courts. Then you'll notice a flight of stairs - these lead up into the dressing room. At the moment, you're standing at the refreshment stand, drinking. The first thing you need to do is go to the practice arena. This is when the fun starts.

All the courts you play on are clay. On the opposite side of the net stand three mean looking ball throwers. In the top right hand corner of the screen, you see your coach. He will make a move and then you have to follow his lead. After much training here, you can go into the game.

Walking out onto the hard clay court, you look around and see many faces looking down on you. You see your coach with a hopeful grin on his face. You shake your opponent's hand - the famous Ivan Lendl. You walk to your half of the square and eye Ivan off.

Tennis Cup II has good graphics. The many animated shots are good, with no jerky movements. The sound effects are brilliant, especially with the judge's synthesized voice. Like *Tennis Cup*, there's a great array of shots. My favourite is the diving shot, where you dive full length to hit the ball.



FACTBOX

A flashy tennis sim, though a bit hard to master. There are plenty of nice features that should keep you coming back to the game, though in terms of pure gameplay, you may tire of tennis sooner rather than later.

Distributed by Mindscape (02) 899 2277. RRP \$69.95

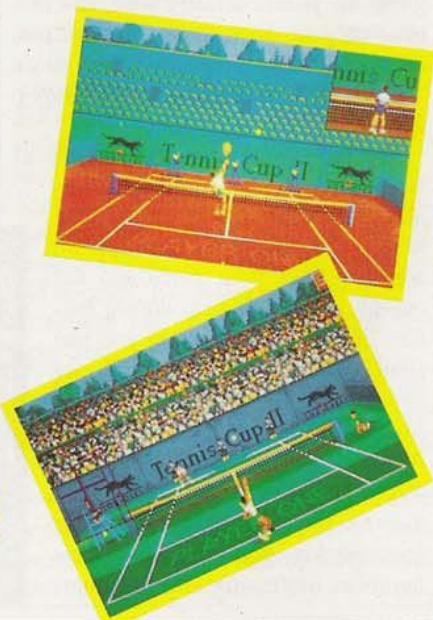
Ratings:

Graphics:	76%
Sound:	92%
Addictiveness:	65%
Lastability:	71%
Overall:	86%

You can play against a friend or the computer. When playing against a friend, the screen is split into two parts - it's pretty good fun. There is even an animated ball boy who runs out onto the court and fetches the ball.

After each of your matches, you will be shown some stats. These tell you how many first and second serves had beaten your opponent, and how many forehand, backhand, forehand volley, backhand volley and smashes were played throughout the game.

One thing I didn't like about *Tennis Cup II*, though, is the fact that you need perfect timing to hit the ball - not like *Pro Tennis Tour*, where you could be at least a fraction of a second out and still hit the ball. □



MICHAEL SPITERI'S

Adventurer's Realm

Greetings to all adventurers throughout the nation and beyond! Thou art welcome to the land of the Realm, where thou art quit of all thy problems as far as adventure and roleplaying are concerned. May I suggest you write to our many hundreds of Clever Contacts that are scattered across the countryside. Their expertise has proven to fix many a sticky situation, or drop a line to Kerrie to obtain free hint sheets!

If thou art still stuck then thou must

really be deep in it. You could try dropping a line to me but thou must enclose ye stamped addressed envelope or thy head will be chopped off, and ye could also get in my good books by buying one of my good books ... read on!

Adventurers Realm, 12 Bridle Place, Pakenham, Vic 3810 (for adventure probs, help and chat.)

The Realm's Dungeon, PO Box 1983, Canning Vale, WA 6155 (for RPG problems, not hint sheets.)

Adventurer's Realm Hint Books

Computer Adventure Games: The Second Official Adventurer's Realm Hint Book is available from newsagents everywhere for only \$10. It contains detailed hints and tips to over 25 of the latest adventure and roleplaying games, plus valuable playing tips, and heaps of adventure mapping sheets. A great Christmas gift or stocking filler! Look out for the big green dragon on the front cover! Contact Darrien on (02) 398 5111 if you cannot get hold of a copy.

We are down to our last thirty copies of the *First Official Adventurer's Realm Hint Book*. It contains hints and tips to over forty (yes, forty!) adventure games. Just enclose \$9 and send in to ... Realm's First Hint Book, 12 Bridle Place, Pakenham, Vic 3810.

Free Hint Sheets

Thanks to Kerrie Spiteri, the hint sheet service is quicker than quick. Send her a list of up to four hint sheets from the list below, and enclose a stamped addressed envelope for speedy reply (or don't enclose one and you'll get nothing at all!) to: Free Hint Sheets, 12 Bridle Place, Pakenham, Vic 3810.

Corruption, Pool of Radiance, Zak McKracken, Maniac Mansion, Zork 1, Zork 2, Zork 3, Bards Tale I, Bards Tale II, Bards Tale III, Guild of Thieves, Jinxter, DejaVu, Hampstead, Hitchhikers Guide to the Galaxy, Faery Tale, Borrowed Time, Never Ending Story Pt1, Dracula Pt2, The Hobbit, Pawn, Fish, Uninvited, and ... The Complete Clever Contacts Listing.

Adventure Chit Chat

Regular Realmer Matthew Armstrong of Geelong in Vic writes ...

"To Mrs S. Symonds from way back in May, I have found a shop that sells *Rick Dangerous 2*, the place is Jennings Computers, 43 Melbourne Road, Drumcondra, Geelong, Vic 3320. Ph (052) 78 7333.

"Michael, I think you should ditch some of the old hint sheets like the *Zorks* and those Lucas Arts ones (*Maniac Mansion, Zak, and Indy*). These are pretty old, and almost all the Clever Contacts can help out with them. Getting rid of some of these Golden Oldies should make room for some new ones. I'm sure other people send in hint sheets!"

"Oh yeah, well done Kerrie on your great job with the hint sheets. Thanks for putting the best part of the ACAR magazine out for the public. It's the

best Australian Magazine ever!"

"I think that the demand for Adventurers' Realm is so big that you could probably make Adventurers' Realm its own magazine, with sections from Phil Campbell and Kamikaze Andy, of course. Just a wild idea, but a good one. You could even hold a competition for the magazine's name!"

Mike: Thanks for your comments and for all those compliments, Matthew, you sure know how to feed our egos! Surprisingly, the old hint sheets you recommended we ditch are in fact the most popular! We will start getting rid of the really old games like *Borrowed Time, Hampstead, and Never Ending Story*. We have heaps of new hint sheets ready to go in, and these will appear gradually.

As for a new magazine, it sounds like a great idea, especially the bit

where Phil Campbell works for me instead! Why a competition for the title, though, it would naturally be called "Adventurers' Realm".

Kristian Adamson of Springwood in NSW writes ...

"I would like to give my comments on the quality of SSI's Role Playing Games on the Amiga. These are much too easy. *Curse of Azure Bonds* took me about two weeks, *Pool of Radiance* took about two weeks, and worst of all, *Eye of the Beholder* took me one week! I must admit in *Eye of the Beholder*, I did not find all the secret rooms but the Beholder at the end was very easy to beat as it did not hit me once! (I only hope the sequel is much better). By the way, *Champions of Krynn* took me only one day! Amazing, but true. My message to SSI is make your RPGs bigger, better, and harder!"

Mike: Well, that's something you don't hear too often. SSI games easy? You gotta be kidding! Kamikaze Andy constantly gets bombarded with problems for these games

from every woman, man and dog. *Eye of the Beholder 2* is pretty hot, though I doubt if it will keep a super brain like you occupied for very long.

Ben Gunn of Woollahra in NSW writes ...

"There are still a lot of new adventures being released for the C64, although of course not as many as there used to be. Some of the best of the latest are *Elvira, Space Crusade, The Magic Candle, Keys to Maramon*, plus more! All of these are available in Australia, and any decent adventurer should have no trouble tracking them down. They are usually a lot cheaper than Amiga and IBM software too!"

Mike: Let me tell you Ben, there are many decent adventurers out there who are having lots of trouble tracking down C64 adventure games, mainly due to the fact that most are thinly disguised arcade games! Still, I'd be interested to know where you can obtain any C64 adventure games. Thanks Ben!

Adventure Swap Shop

The response to this section has been incredible! If you are after old adventure games, or wish to sell/swap some, the send the details to me to print here.

Bill Weeden of PO Box 123, Clayton, Vic 3168 has an enormous range of adventure games for the C64/C128 he would like to sell. The list includes many Infocom, Tellarium, Ozisoft and Melbourne House which Bill will sell for about 1/3 of the original cost. All are in excellent condition and have been well looked after. Drop Bill a line to obtain a complete listing.

Domenic Ianello of 69 The Grove, East Coburg, Vic 3058 has *Zork I, Leather Goddesses of Phobos, Space Ace I, Megatraveller I*, and would sell, or swap them for *Starfleet, Elite, Faery Tale, Bards Tale I, Black Crypt, or Buck Rogers: Matrix Cube*.

Shane Robertson of 14 Sonoma Road, Budgewoi, NSW 2262 would be willing to pay top dollar for any adventure games anyone is selling (mainly Infocom, Magnetic Scrolls, and Infocom titles).

Ian McRae of PO Box 77, Cooranbong, NSW 2265 has *Monkey Island 2, Eye of the Beholder 2, Black Crypt, Populous 2*, and *John Madden US Football* to sell or swap for *Civilization, Lure of the Temptress, Indy and the Fate of Atlantis, Lotus 3, Mad TV, and Ultima 6*.

Matthew Armstrong of 11 Harcombe Street, Bell Post Hill, Geelong, Vic 3215 is in the market for the *Space Quest Trilogy* for the Amiga if it exists. Matt also asks when *Fate of Atlantis* is due out, the answer is very soon!

Finally, Travis Hill of 9 Feiglin Court, Ocean Grove, Vic 3226 has *Shadows of the Beast II, Lemmings, ProTennis Tour II, and Zone Warrior*, which he will sell for no less than \$15 each.

Clever Contacts

Watch out for a complete clever contacts listing in the January issue (reserve your copy now!). In the meantime, here are a couple of updates ...

New cabby on the rank is Shane Robertson of 14 Sonoma Road, Budgewoi, NSW 2262, who can offer help in *Dodgey Geezers, Mask of the Sun, Hobbit, Dragonworld, Fish, Pay Off, Runaway, Wishbringer, Zorks, Bards Tale 2, Bastow Manor, Voodoo Castle, Zak McKracken, ZZZZZ, Castle Master 1 & 2*.

Super Contact Felicia Holmes has thrown the puzzled adventure word into disarray by changing her address. She can now be contacted at 70 Sheffield Road, Wattle Grove, WA 6107. Her list now reads ... *Champions of Krynn, Death Knights of Krynn, Heroes of the Lance, Zak McKracken, Faery Tale, Kings Quest 2, 3, Police Quest 1, 2, Space Quest 3, Quest for Glory 1, 2, Willy Beamish, Countdown to Doomsday, Operation Stealth, Monkey Island, and Legend of the Sword 2*.

Darren Mummery of 28 Cunningham Ct, Golden Grove, SA 5125 adds *Eye of the Beholder, Champions of Krynn, Monkey Island, Police Quest 2*, and *Pools of Darkness* to the many games he can offer help in.

Remember, always enclose a stamped addressed envelope, (and funds if photocopies are required), when writing to a Clever Contact. Their generous work is all voluntary, and they should not have to dish out cash to solve YOUR problems! And of course, a very big thank you to all our clever contacts for a job well done!

Help, Help & more Help or the **Smart Adventurers Dept.**

Game: Drak

To: Paul Andrews (August)
From: Malcolm Harvey
Help: What to do in the tunnel with the torch?

Sounds as if you are at the start behind the clock. To get in the passage behind you, you must use the match because it is dark in there. It takes a while to get the right text it under-

stands though. Just persist and you'll get it. Note: This game does not have a proper ending (a bug?), so when you reach Dracky's crypt, you've done it!

Game: African Safari

To: Paul Andrews (August)
From: Malcolm Harvey
Help: What to do in the desert?

This part of the game is very tricky. Basically there is no fixed way to pass this level, you just have to fool around a bit. Follow the signs that you find down south. From there, go about three times to the left, then go north for a while, then at sometime go west.

Game: Magic Candle

To: Anyone!
From: Ben Gunn

Help: You can avoid a lot of conflicts by using a teleport spell to bypass land based monsters. The only mage that carries this spell is Tamas (at the Crystal Castle). His name won't appear on the list of volunteers until you completely clear the dungeon that is situated at the Crystal Castle. Once you have done this, return to the Knights' Room, recruit Tamas and take him (and your other magic users) to Vadras (in Kharin) to raise their learning skill to maximum level. As long as your characters are reasonably powerful you can do this fairly early on in the game, thereby saving a lot of time when traveling around. To get to Crystal Castle, catch a ship to Udar from Merg. (Enter the Merg tavern at noon and ask the captain about passage).

Problems, Problems & more Problems or the **Troubled Adventurers Dept.**

Domenic Iannello is the first troubled adventure this month, and he is really stuck in *Phantasie I*. He has managed to explore everywhere except one castle in the Western part of the land which seems to gas him to sleep, then locks him up deep in a dungeon. (Try worshiping Zeus, suggests Mark Harris). There is also a cave on a lone island that he cannot seem to enter because his characters keep turning back with great fear! Well, there is usually a reason why characters turn back in fear, but can anyone explain why?

Mr. Darren Mummery from Golden Grove in SA is having trouble in *Operation Stealth* and *Future Wars*. He cannot seem to get out of the cage dangling above the pool of piranha in *Operation Stealth*, and escaping from a cell after being captured on the shuttle is his problem in *Future Wars*. Any takers?

Richard Uhr from Goodna in Qld is

stuck in *The Pawn*. He knows (thanks to the Realm Hint Sheet) that he has to break the wall in the Golden Palace Courtyard, but he doesn't know how!

Christian Forrester is one of the first adventurers to write to the Realm stuck in *Hook!* He is in the Lost Boys Hideout with a piece of elastic, dust, and pan pipes, which is great, but he doesn't know what to do next! He has a hunch that he has to make a catapult so that he can fly, but how does Christian do this?

Kristian Anderson of Springwood in NSW is not having such a great time in *Neuromancer*. Can anyone tell him how to get Comlink 5? He already has Comlink 4 and Ninja 5000.

(The organisation is the ESFA, and the code is Eastclob Longisland). Finding the scientist's hut in Battletech is also a problem, as is starting off in the Moontower in Bloodwyd. Kristian has found a flashing wall and gone throughout the teleporters, and he may have cast a Magelock spell on a door he can't open. If this means any sense to anyone, please write in quickly!

Anthony Bell of Stirling in ACT is stuck in *The Fools Errand*. He writes ... "I have solved the bulk of the puzzles, but am unable to go any further in the game because I'm stuck at several puzzles, and without a solution to these, I cannot go any further. The

puzzles I'm stuck at are: The Dream (which requires the pushing of eight buttons in the correct sequence), The High Priestess (which has me puzzled), and The Three Ships (which also has me puzzled). Any help at all would be most appreciated!" Nuff said.

Barry Stubbington is currently having problems in the *Star Trek 25th Anniversary Game*. He is up to That Devil's Moon. There is a big steel door with a display panel and key pad. What code does Barry have to enter in the key pad for the door to open?

Ronald E. Cutts from Wendouree is another avid Realmer who uses an IBM-PC. He is stuck in *Indiana Jones and the Last Crusade*. He has come to the skull cave, and no matter which way and how many times he hits the skulls, the door won't open!

(Mark Harris suggests CFDEA!)

Adventurer of all adventurers Mark Harris would appreciate any hints on *Fate: The Gates of Dawn* (by Reline Software). Give him a buzz on (02) 369 4920, and he might be able to offer you some help in return from his huge hole of help.

Finally, Matthew Armstrong wants to know how to stop the drunken driver in *Police Quest I*. (Realm's First Hint Book offers the following hint ... To pull a car over, get behind it and let them know you are there!).

The Dungeon

by
Kamikaze Andy

As promised last month, here are some more details on Sierra's latest onslaught on the graphic adventure market. *King's Quest VI: Heir Today, Gone Tomorrow* (ouch!) will continue the adventures perpetuated by King Graham. This time, it's Prince Alexander who plays the starring role. It seems that young Alexander is pining for his true love Cassima, and through a magic mirror he finds that she's about to be married off to someone else.

Will Alexander be able to make it to Cassima in time? Or will he be foiled in his plans by the mysterious Vizier? Game designer Roberta Williams promises an adventure twice as large as *King's Quest V*, with multiple endings and lots of optional subquests to solve. And of course, it goes without saying that the graphics and music are going to be topnotch. It seems that Sierra plan to use 64 colour Extra Half Brite mode for all upcoming releases, which is great news!

Space Quest V

Space Quest V reintroduces Amiga gamers to Roger Wilco, nice guy at heart but klutz extraordinaire. This time, against all odds, Roger has managed to pass the exams at the local Space Academy (must be the future version of *Police Academy*!) and is assigned to be the Captain of his own starship!

With a variety of alien beings unfortunate enough to be part of his crew, Roger blasts off into space in search of fame and fortune. Soon, he comes across a nasty plot hatched by some nasty bad guy to dump toxic waste on unsuspecting planets, and it's up to Roger once more to clean up the gal-

axy (literally!). *Space Quest V* is being designed by the folks at Dynamix (though it will still be published under the Sierra label) and looks set to launch into our Amigas sometime next year.

For younger adventurers, Sierra has plans to follow up its current releases *EcoQuest* and *The Castle Of Dr. Brain* with, yep, you guessed it: *EcoQuest II* and *The Island Of Dr. Brain*. The latter provides more of the same type of mind boggling puzzles as its predecessor, and has a fairly coherent storyline to boot. *EcoQuest II: The Lost Secret Of The Rainforest* places our young hero from the first game, Adam, in the middle of a campaign to prevent deforestation. With the help of some of the animals that inhabit the rainforest, Adam has to seek out the legendary



Seven Cities Of Gold and discover its ancient treasure before a villainous developer called Slaughter. It's a race against time - and it's a race you can't afford to lose. Again, both *EcoQuest II* and *Island Of Dr. Brain* will feature stunning graphics (the screenshots I've seen so far are some of the best Sierra has ever done) and will light up your Amiga screen in 1993.

As well as its new products, Sierra has finally acknowledged that the updated versions of *Police Quest I* and *Quest For Glory I* (the former with digitized graphics similar to that of *Police Quest III*, the latter with amazingly realistic claymation) will also ship for the Amiga in the near future.

Other graphic adventures due to hit the market soon (and most of these feature an RPG/Fantasy theme) include

Darkseed and *Lure Of The Temptress*. In fact, *Temptress* has already been in the stores for some weeks now, and is an interesting attempt at producing a graphic adventure within a near RPG setting. *Darkseed* is reported to have some of the most exciting visuals ever seen on a PC, with often moody graphics bordering on horror.

Speaking of horror, the folks that designed the hit RPG *Elvira* plan on bringing out another creepy crawlly game next month, titled *Waxworks*. Guess where the game is set?

Will it or won't it? That's the question some Amiga RPGers are asking of MicroProse and its plans to convert its first RPG, *DarkLands*, for the Amiga. It seems that the lukewarm response to *DarkLands* following its IBM debut has made the financial managers over at Wild Bill Stealey's company think twice before committing on an Amiga version. Unfortunately for us, it looks like this is the trend for most Amiga games coming out of the States these days - and even an outstandingly successful product on the IBM (like Origin's *Ultima Underworlds*, for example) does not necessarily imply an Amiga conversion.

Ultima books

For those *Ultima* fans who are gloomily whiling away the days until *Ultima VII* appears on the Amiga (and you might be in for a veeeeeeeery long wait), take solace in some of the excellent books written about the legendary land of Britannia. Besides Compute Books' *The Official Book Of Ultima*, other recommended Avatar readings include *Mastering Ultima* and *The Avatar Adventures*. All provide in-depth "behind the scenes" info, as well as clues for every *Ultima* published. You might also be interested in picking up author Lynn Abbey's novelization of *Ultima* (set in the period of Blackthorne's rule, around the time of *Ultima V*). Lynn is a big fan of the *Ultima* series and collaborated with *Ultima* designer Richard Garriott over the plots of the (currently two available) novels.

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